

Coins, one of the great practical inventions of the Greeks, were for them an artistic medium no less worthy than sculpture or pottery. Coupled with the aesthetic values of Greek coins, magnificently demonstrated here, is the contribution they make to archaeological data and to our knowledge of ancient rulers, political alliances, and economics.

The great beauty of Greek coins and the consummate skill employed in their production are revealed in the plates of this book. A few specimens are illustrated actual size, reminding us of their monetary use, but the rest are enlarged from two to as much as five times, permitting us to view them as with a magnifying glass. These small objects suddenly reveal an unexpected sculptural force, and they can be appreciated as the full equals of Greek sculpture in stone. The precious metals of the coins—gold, silver, and electrum, an alloy of gold and silver—contribute to their beauty and are faithfully reproduced in the colorplates.

These coins were minted throughout the Greek world, which extended from Asia Minor to Spain in seven major areas. All of the important mints are included here, enabling the reader to follow the development of the coins of different areas. Turning these pages, we realize the extent and the importance of Greek civilization.

Professor Max Hirmer, a long-time connoisseur of ancient coins, has photographed the finest specimens in the museums and private collections of Europe and in the international auctions of recent years. In the 240 plates over 800 individual coins are illustrated—the majority shown on both sides. Dr. Colin M. Kraay, of the Heberden Coin Room of the Ashmolean Museum, Oxford, brings out the many aspects of Greek coinage in his introductory text. He provides the history of each area, mint, and coin, which makes the book an obvious necessity for collectors.

Here is a skillful selection of the finest Greek coins accompanied by an authoritative text. Every reader can now enjoy these coins as works of art, and experts and students will delight in this new documentation of historical and numismatic values.

GREEK COINS



I SYRACUSE, 79. 480-479 BC. *Rev.* Head of Arethusa (x5)

GREEK COINS

5-901

BY COLIN M. KRAAY

PHOTOGRAPHS BY MAX HIRMER



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MAX HIRMER

INTRODUCTION

Although Greek coins have been collected for several centuries, it is only in the last hundred years (and particularly since the development of photography) that they have been able to be assembled in sufficient numbers to provide a sound basis for study and classification. The subject is, therefore, still comparatively new, and every year sees the publication of work of fundamental importance. In these circumstances fresh gains in knowledge tend to remain long hidden in specialist and periodical literature, while more general works often continue to repeat material which has long been disproved or at least partially emended. The situation is aggravated by the fact that the only comprehensive handbook, though still indispensable, is now more than half a century old. Professor Hirmer's superb photographic survey of Greek coinage offers an opportunity to remedy this deficiency in part: interpretations long, and perhaps uncritically, accepted can be freshly scrutinized, wide brackets of date can be narrowed by concentrating upon the position of a particular coin in a sequence, and a general view of the coinage can do something to counteract the distortion inherent in the study of single mints in isolation. The success of such an attempt will certainly be uneven, because our knowledge of Greek coinage is itself uneven; the history of some mints is known in the greatest detail, so that every die employed has been recorded, while elsewhere the evidence either has not survived or still awaits collection and study.

In preparing this English edition, I have necessarily relied at many points on the German text of Dr P. R. Franke and Professor M. Hirmer (*Die griechische Münze*, Munich 1964), and gratefully acknowledge that my work has been lightened by theirs, especially in the descriptions of the coins. The commentary, however, has usually been written independently, without reference to the German text.

One matter in which there will be wide divergence is the spelling of proper names, in which I have usually followed the tradition established by *Historia Numorum*. As B. V. Head said in his Preface, 'any system carried out with undeviating consistency can hardly fail to lead to unsatisfactory or pedantic and sometimes even to absurd results. I have therefore preferred to be a little inconsistent.' In practice, this means using an English form where there is one (Syracuse for Syrakosai), but otherwise choosing the Latin form rather than the Greek (Cnidus instead of Knidos). I have, however, preferred Taras to Tarentum.

In a work of this kind, based on experience accumulated over a number of years, the contribution of others cannot always be easily assessed, but my debt to Dr E. S. G. Robinson, who has long guided, and still continues to guide, my numismatic thinking, is immense, though it must not be assumed that he agrees with all my conclusions. Mr G. K. Jenkins of the British Museum has given me the benefit of his advice on a number of problems, and has supplied me with dates and references from his forthcoming study of the mint of Gela; he also executed some of the preliminary work for this volume. Likewise Dr H. A. Cahn of Basel and Dr J. P. Barron of University College London have kindly provided references and dates based on their awaited books on the coinages of Cnidus and Samos respectively. I am grateful, too, to Miss J. Trafford of the Heberden Coin Room, Ashmolean Museum for her patient and meticulous typing of my manuscript, and to Wladyslaw Masiewicz for drawing the maps. Finally, I must record my good fortune in finding in Mr P. A. Clayton of Thames & Hudson not only a patient editor but also an understanding numismatist.

COLIN M. KRAAY

GREEK COINAGE

THE SCOPE OF GREEK COINAGE

The term 'Greek coinage', as currently used by students of coinage, is a legacy from a time when almost all ancient history was either 'Greek' or 'Roman'; since the Latin-inscribed coinages of the Roman state (whether Republic or Empire) were obviously Roman, all the rest had to be 'Greek', and this non-Roman residue was both varied and extensive. In the centuries following the collapse of the Mycenaean civilization Greek-speaking people had settled in several waves on many parts of the coasts of the Mediterranean and the Black Sea; outside Greece proper and the Aegean islands, the most important concentrations were in Sicily and South Italy, along the north Aegean coast and around the coasts of Anatolia. The coinages of all these areas, together with a number of others of less importance, were Greek in the full sense in that they were produced by Greeks and for Greeks. Adjoining these areas were non-Greek peoples, such as the Carthaginians, the Etruscans, the Persians and the Phoenicians, who were deeply influenced by Greek culture; among the practices they adopted from the Greeks was that of minting coins. These are usually Greek in fabric, because coinage was an essentially Greek invention and there was no other model to copy, though they bear designs and inscriptions appropriate to the non-Greek peoples for whom they were minted; nevertheless they are embraced in the term Greek coinage, and many examples are illustrated on the plates which follow. Greek coinage thus includes all the non-Roman coinage of the ancient world struck between the Straits of Gibraltar and north-west India. With the still wider extension of the term to cover the Greek-inscribed civic issues of the Roman Empire this volume is not concerned.

THE ORIGIN OF GREEK COINAGE

Transactions involving precious metals are far older than the invention of coinage; in such transactions the metal might be in the form of irregular nuggets, or worked into jewelry or vases, or in some semi-conventional shape such as bars or rings. In some transactions such as royal distributions or the exchange of princely gifts the precise amount of metal involved might be irrelevant, but in any which can be classed as commercial the quantity and the quality of the metal are of the first importance; the former is easily determined by weighing, the latter by experience and empirical tests. Transactions involving coins differ from these in that the metal is divided into standard pieces of uniform weight (or their recognized subdivisions), upon each of which is stamped some device. The place and time of these changes are now accurately known, but their purpose is still a matter of some discussion.

The earliest coins appear in western Anatolia in the area of interaction between the Greek cities of the coast and the non-Greek kingdom of Lydia in the interior, though whether the idea was Lydian or Greek in origin will perhaps never be decided; the earliest coins are uninscribed and the designs with which they are stamped no longer reveal their origin. By about 600 BC, however, Lydian regal coins can be identified, one of which is inscribed

with what is probably the name of King Alyattes, 610–560 BC; other types (nos 587, 588, Pl. 177) no doubt belong to the Greek cities of the coast, such as Miletus, through which Lydia traded with the Greek world. Apart from the tentative identification of the name of Alyattes, the approximate date of these early coins is indicated by that of the numerous objects found associated with them in the excavation of the temple of Artemis at Ephesus. The latest objects were of the early sixth century, which is thus the terminal date of a deposit that included primitive typeless coins (no. 583, Pl. 177), as well as more developed examples. Since there is no reason to suppose that a long lapse of time is involved, it would seem that the process which culminated in the appearance of distinctive coin types at a number of centres by about 600 BC need have started no earlier than about 650 BC.

The purpose which these new coins were intended to serve is not immediately obvious, nor is it clear why a practice which spread so widely and rapidly among Greeks was adopted so much more tardily by their non-Greek neighbours. Unlike bullion, coins are made in units of standard weight, and are stamped with designs which identify the issuer; these designs are at first sometimes (*e. g.* no. 585, Pl. 177), and in later periods normally, further identified by the addition of inscriptions. The issuer in all identifiable cases proves to be the supreme political power in each city or state; there is no evidence in the Greek world for the private issue of coins by bankers or merchants. Indeed, in the stage of social development which these states had reached in the seventh and sixth centuries BC it is highly improbable that those sections of the community engaged in trade had either sufficient organization or sufficient influence to induce the kings or aristocracies in power to adopt such a practice as the minting of coins. We must, therefore, seek the original purpose of coinage in the interests or convenience of the ruling powers whose names and devices are stamped upon them.

The seventh and sixth centuries were periods of great change and development in Greek life, which was in all its aspects becoming much more complex than it had been since the end of the Mycenaean period. Social and military patterns were changing, states were becoming inter-related often over long distances, and a new wealth was producing major architectural and sculptural monuments. In such circumstances those who held political power were making or receiving payments with far greater frequency than had been the case in the simpler societies of the past. Mercenaries had to receive wages in large numbers of identical sums; architects and sculptors had to be paid for their work on temples, grave stelai and other monuments; marble, metal and timber had to be imported from abroad; as for receipts, revenue depended on taxes, fines and harbour dues. All these transactions could be, and no doubt for a time were, conducted with bullion, but all would be immensely simplified by the existence of recognized units of currency. The state could make the use of these obligatory in all official transactions, and thus, instead of receiving miscellaneous metal of uncertain quality, it would receive payment in units of known value, which it had itself issued and marked with its distinctive device.

If the factor of convenience was perhaps at first dominant, the incentive of profit cannot have been far behind. The value of a coin exceeds that of the same weight of uncoined metal by the cost of the labour which has been spent upon it; but it is further enhanced by the demand arising from its obligatory use in official transactions. The issuer is thus in a position to charge a premium for his coins over and above their value as bullion, and in so far as the premium exceeds the cost of production it will be clear profit. Such profit may be increased from time to time by declaring the existing coinage invalid for official transactions, and so compelling the payment of a fresh premium to secure the new official currency.

Though coins were originally produced for use in official transactions, they will soon, like any other valued commodity, have passed into private trade within the state which issued them. Use in foreign trade will have come more slowly partly because the obligatory use of a particular coin in a particular place will have tended to keep coins near their places of issue, where their value was highest. Moreover, we must remember that nearly all states had to obtain their metal from without, and will therefore have tried to conserve such stocks as

they possessed; only the rare possessors of mines, like Athens, can have afforded to encourage the export of precious metal. Such an interpretation is borne out by the comparative infrequency with which Greek coins were exported, apart, that is, from the issues of states which possessed silver mines. For example, the coins of both Sicily and South Italy are almost wholly confined to their respective areas, and though hoards from the Near East have restored to us impressive numbers of Greek coins, such hoards are often miscellaneous accumulations of old and damaged pieces, which provide no evidence for the regular export of current Greek coinage from other than mine-owning states.

THE TYPES OF GREEK COINS

The most distinctive feature of a coin is the design stamped upon it, which is known as a '(coin-)type', and which serves to identify the issuing authority. The earliest coins usually had a type upon the obverse only, the reverse bearing the geometrical imprint of the punch used to drive the metal into the intaglio of the obverse die, but it was not long before it was observed that this punch could itself be made to carry a second type; this development can be clearly seen at Himera (nos 63, 64, Pl. 20). From the late sixth century Greek coins normally had a type on both faces, though a few states clung tenaciously to a formal version of the old-fashioned reverse punch long after it had been superseded elsewhere (*e.g.* Aegina, nos 337, 338, Pl. 113, and Cyzicus, nos 721, 722, Pl. 200).

The variety of Greek coin-types is enormous, but the motives which governed their choice can usually be detected. Among the most obvious is the patron deity of the issuing city, especially when it was the site of a famous temple: Athena at Athens (nos 351 ff., Pls 116 ff.), Olympian Zeus at Elis (nos 504–506, Pls 157, 158) and Artemis at Ephesus (no. 601, Pl. 179); where the city was named after a deity, the choice was inevitable: Poseidon at Poseidonia (nos 217–222, Pls 77, 78) or Heracles at Heracleia (nos 255–258, Pls 88, 89). In such cases the reverse of the coin often shows some creature or object specially associated with the deity on the obverse: the owl of Athena, the eagle of Zeus, the lyre of Apollo (nos 407–413, Pls 132, 133), or the stag of Artemis. These are all figures of pan-hellenic significance, but sometimes a strictly local deity is chosen, such as Arethusa, the nymph of the fresh-water spring at Syracuse (nos 122, 123, Pls 44, 45). Figures drawn from the mythical or legendary history of a place are also obvious choices: Pegasus at Corinth (nos 478–488, Pls 152, 153), the Minotaur at Cnossus (nos 541, 542, Pl. 165), Protesilaus, the legendary founder of Scione (no. 393, Pl. 128), or even a possibly historical founder as Leucippus at Metapontum (nos 242, 243, Pl. 84).

Another common category relates to local products; it is readily understandable that a people should choose as their distinctive badge a product for which they were famous, or which ensured their national wealth. Viticulture was widespread and could be most simply referred to by grapes (Naxos, nos 1–5, Pl. 1) or a vine (Maronea, nos 429–431, Pl. 139); a wine cup (Naxos, nos 523, 524, Pl. 162) or amphora (Terone, no. 401, Pl. 130) were equally appropriate, as was the god of wine, Dionysus himself (Naxos, nos 1–12, Pls 1–4; Mende, nos 403–406, Pls 130, 131). Among other products one may note the barley of Metapontum (nos 248, 249, Pls 81–85), the horses of Thessaly (nos 466–468, Pl. 148), the silphium of Cyrenaica (nos 783–795, Pls 213–216), and the tunny fish of Cyzicus (nos 698–722, Pls 198–200); the prominence of cattle and horses on the coins of the Macedonian tribes (nos 376–388, Pls 123–126) certainly refers to their principal occupation and wealth.

Another source of coin-types is the pun, though the distinction between a pun on a place-name, and a place named after a local feature is not always clear. For example, Selinus was presumably so named from the local abundance of the *σέλινον* or wild parsley, the leaf of which formed the city's badge (nos 184, 185, Pl. 66), and the same may be true of the rose of Rhodes (nos 644–647, Pls 188, 189), but it may be doubted whether

Melos originally had anything to do with the *μήλον* or fruit, which appears as its badge (no. 532, Pl. 163). The constant appearance of cattle on the coins of Euboea (nos 370–372, Pl. 122) is clearly a pun on a name which means ‘rich in cattle’, and the pomegranate at Side is probably also a pun on the city’s name (nos 661, 662, Pl. 192). Similar explanations may underlie some otherwise unexplained types, for ancient etymology was often extremely fanciful, and Greek puns are sometimes as strained as some of their modern successors.

The great majority of Greek coin-types can be classified under the three headings: 1, deities and semi-divine characters with their appropriate creatures or attributes; 2, local products, and 3, a pictorial representation of the city’s name, whether by pun or through some local feature which actually gave rise to that name. To these may be added the regal group, on which the portrait of the king normally appears upon the obverse; though today this is the most familiar design for coinage, it is one which in the ancient world became common only after the disintegration of Alexander the Great’s empire. One type which does not belong to any of these groups is the quadriga so commonly seen on the coinages of Sicily in the fifth century. As first used at Syracuse (no. 72, Pl. 23), it seems to have been simply an expression of the interest which the local aristocracy, in common with other aristocracies of the archaic age, took in their horses and in the sports connected with them; in the early fifth century this hitherto distinctively Syracusan type appears at Leontini (nos 13–16, Pl. 5) and Gela (no. 157, Pl. 56) as a sign of Syracusan supremacy. The design had by now become so well established as the proper type for the obverse of a Sicilian tetradrachm, that it was in time adopted (with local variations, such as the biga of mules at Messana, no. 51, Pl. 16) by almost every mint in the island.

Since coin-types were intended to identify the issuing authority, there was a tendency for their main features to remain constant over long periods, sometimes for two centuries or more. Usually stylistic development took place, which was perhaps less obvious to the ancient users than it is to modern students, who can lay out the coins of several centuries side by side, and are consciously looking for differentiae to aid classification. At Syracuse (Pls 24–45) throughout the fifth century there was constant invention on the basic formula of the head of Arethusa surrounded by dolphins, and at Taras the themes of horseman and dolphin-rider were explored over a much longer period (Pls 105–108); variation at Corinth (Pls 152, 153) was much less during more than two centuries. Only at Athens, however, does there seem to have been a deliberate attempt to freeze the coin-types in the style of a particular period; the designs adopted by Athens early in the fifth century (themselves little altered from what had gone before) continued in use with only unconscious variation until well into the third century BC (Pl. 119). Through the possession of her own silver mines the coinage of Athens was exported on a greater scale than any other; in order to maintain the confidence of foreign users, its appearance was altered as little as possible.

Other mints preferred to keep the state badge unchanged on one side of the coin, while permitting considerable variation on the other; at Metapontum, for example, the reverse is always an ear of barley, but the deity on the obverse changes frequently (Pls 82–85); in the fifth and fourth centuries at Abdera (Pl. 138) the reverse of the coin was chosen by the magistrate or official in charge and, in consequence, changes completely with each issue, though the obverse is invariably occupied by the national badge, a griffin. Regal coins were usually designed so as to have a royal head on the obverse and a deity on the reverse; within reigns the constant types represent the uniform royal authority over a number of mints which, left to themselves, would produce totally diverse types. Each ruler, however, tried to introduce variations within the formula to emphasize his particular claims, achievements or qualities.

Peculiar in their uninhibited variation are the electrum coinages. Cyzicus declares itself only through the minor, but constant, element of the tunny-fish, while the main type changes with every issue (Pls 198–200). Phocaea (nos 594–597, Pl. 179) and Mytilene (nos 695, 696, Pl. 197) behave in a similar manner. Here evidently there was no primary intention to identify the mint of origin. These were not coins with which the issuing

states required official payments to be made within their territories, but were trade currencies marketed for foreign use, and carrying no guarantee from the issuing mint.

SYMBOLS AND SUBSIDIARY FEATURES OF TYPES

Very often the obverse or reverse type is accompanied by an unconnected object placed either in the field or below the ground line in the exergue; such objects are normally referred to as symbols, and they may be used in a number of different ways, though their precise significance in a given case is often a matter of guesswork. The explanation of such symbols will also differ according to whether they seem to have been constant over a number of years or to have been changed with greater frequency. At Syracuse, for example, the sea-monster (no. 83, Pl. 28) and other symbols were retained on the coinage longer than the tenure of any normal magistracy; a possible explanation would be that they were the trade-marks of firms employed to strike coins for a number of years, who were required to sign their work in this way.

Symbols which change more frequently are usually classed, somewhat vaguely, as issue-marks, though, once again, their precise functions are very uncertain. It is easy enough to see that successive issues should be marked by different symbols, but the meaning and use of such symbols probably varied from place to place. Ultimately the symbol may indicate the responsibility of a particular man for the quality and quantity of the batch of coinage marked with his symbol, though whether this man was a mint official, a contractor, a magistrate, or a private citizen performing a liturgy (an obligatory expenditure of private wealth for a public purpose) is usually quite uncertain; on the late Athenian tetradrachms (no. 365, Pl. 120) the symbol is associated with the first of the two or three magistrates named. It has also been suggested that the symbol may be a device employed by the mint for checking bullion. When an issue of coin was authorized by the state, it may have been allotted a symbol, which was stamped on the bullion released by the treasury; the weight of the bullion so marked would be checked against the weight of the coins bearing the same mark. Finally, on otherwise uniform regal issues an appropriate symbol is sometimes used to distinguish different mints (no. 570, Pl. 172).

LEGENDS ON GREEK COINS

Inscriptions on coins are known as legends; these are used to convey a number of different kinds of information: 1, to name the people or ruler issuing the coin; 2, to name the magistrate or official in charge of the issue; 3, to label a type or some part of it; 4, to name the die-engraver; 5, to record a date, and 6, to mark a denomination. Nos 1 and 2 are far more common than any of the remainder.

1. Most early coins bear no legend and identify themselves by their types alone; if a legend is present it may be confined to the initial of the mint, as at Corinth (no. 478, Pl. 152). As mints multiplied, however, more specific identification became necessary, and by the end of the sixth century the first three or four letters of the name were being used, as *META* at Metapontum (no. 229, Pl. 81) or *AΘE* at Athens (no. 351, Pl. 116). Still later a full word became normal, though some places (as Athens and Corinth) always retained the abbreviated forms with which they had started.

Where a word was written in full the genitive plural of the adjectival form was most commonly used, *e. g.* *ΣΥΡΑΚΟΣΙΩΝ* ('of the Syracusans'); sometimes the genitive singular of the place itself occurs, as *ΑΚΡΑΓΑΝΤΟΣ*, 'of Acragas' (no. 170, Pl. 59), or even the nominative, *ΙΑΝΟΠΜΟΣ* (no. 194, Pl. 69), though this may sometimes be the label of the type (as at Selinus, no. 186 rev., Pl. 66) rather than the name of the issuing authority.

Adjectival forms in the singular are also found (*e. g.* *ΝΑΤΙΔΙΚΟΝ*, no. 669, Pl. 193), with which some word such as *νόμισμα* ('coin') or an appropriate denomination must be understood; occasionally this is made explicit as at Gortyna (no. 537, Pl. 164)—'this is the striking of the people of Gortyna'. Where the issuing authority was a monarch his name and titles are usually given in the genitive.

2. Like the name of the issuing state, those of magistrates or officials can appear in any form from a simple initial to the full name; two or more letters are often combined into monograms. Where the name is written in full it most commonly is in the nominative (as at Ephesus, no. 600, Pl. 179), presumably implying 'So-and-so supervised or authorized this coin' or some similar meaning. Another common form is the genitive governed by the preposition *ἐπί*—'in the period of office of . . .' (no. 428, Pl. 138); in some cases this may be simply a method of dating whereby the year is named after a chief magistrate without implying that the person so named had any immediate responsibility for the coinage. Elsewhere, however, the formula with *ἐπί* is used side by side with the plain nominative without any evident distinction, as at Maronea (nos 429, 430, Pl. 139). Unfortunately the office or magistracy held is never at this period stated on the coin (no. 366, Pl. 120 probably naming a Roman quaestor is an exception), though sometimes a patronymic is added (no. 610, Pl. 181). On some later coinages the personal name is at least as prominent as that of the city (no. 724, Pl. 201); in such cases, where the coinage seems to have been too small to have been of much economic importance, it has been suggested that these are the names of rich citizens who financed small issues for reasons of civic pride, and were consequently honoured by being permitted to display their names so prominently on the coinage.

3. The major deities can normally be identified by their attributes, but sometimes a less familiar figure or some part of the type was felt to require an explanatory label. Without their names the river Hypsas at Selinus (no. 187, Pl. 67), the Cretan king Minos (no. 543, Pl. 165) and the Locrian hero Ajax (no. 465, Pl. 148) would not be immediately recognized, for they have in themselves no features to distinguish them from other similar characters; likewise the pieces of armour on the Syracusan decadrachms are there for a special purpose, which is indicated by the word 'prizes' (no. 116, Pl. 40). In one exceptional instance a special coin was itself given as a prize, and is so described at Metapontum (no. 230, Pl. 82).

4. Only very rarely is a die-cutter's function made explicit by the addition of a verb to the personal name, as at Clazomenae (no. 608, Pl. 181); nevertheless a number of names are so inconspicuously placed in the type that they can hardly be anything but artists' signatures. This possibility is confirmed where the same name is found at more than one mint, as that of Euaenetus at both Catana (no. 42, Pl. 14) and Syracuse (no. 101, Pl. 33). The practice was most widely used in Sicily at the end of the fifth century, though even there some of the most remarkable works of the time, such as the decadrachms of Acragas (no. 179, Pls 62, 63), bear no signature. Elsewhere signatures are far less common; a number are known from South Italy (as Velia, no. 226, Pl. 80), and Olym- in Arcadia (no. 512, Pl. 159) and Theodotus at Clazomenae (no. 608, Pl. 181) are also certain.

Inevitably there are a number of doubtful cases, in which it is impossible to decide whether a name is that of an artist or an official. For example, the name of Euaenetus on the Syracusan decadrachms (no. 105, Pl. 35) is so conspicuous that it would surely have been interpreted as that of a magistrate or mint-official, had it not already appeared as that of an artist (no. 101, Pl. 33). Perhaps the explanation is that the man who made a few dies for Syracuse (and elsewhere) in the decade 415–405 BC later became the head of a firm which undertook the striking of the decadrachms. Other doubtful cases are Ph- at Thurium (no. 251, Pl. 86) and Terina (no. 276, Pl. 96), and P- at Terina (no. 278, Pl. 97).

5. The Greeks normally used the letters of the alphabet to express numerals—*A* = 1, *B* = 2, . . . *I* = 10, . . . *P* = 100—but dates in this form do not appear before the Hellenistic age, when coins are sometimes dated according to a number of eras, some of which had a local validity only (*e. g.* no. 752, Pl. 206). Alphabetical sequences, which may represent annual emissions, do occasionally occur earlier than this, as at Thurium and

Samos, though that at Poseidonia (no. 221, Pl. 78) seems to be simply a system of numbering the dies, since there is only one die for each letter.

6. Greek coins are very rarely inscribed with their denominations, though small pieces occasionally bear such inscriptions as *ΔΙΟ* (= diobol); more commonly, though still very rarely, pellets or strokes are employed to indicate the number of units comprised in the piece so marked (*e. g.* Syracuse, no. 133, Pl. 47). Sometimes the principal coin-type was systematically sub-divided for the lower denominations, as at Syracuse where the type of the tetradrachm was a four-horse chariot, that of the didrachm a horseman leading a second horse (nos 72, 73, Pl. 23), and that of the drachma a horseman alone.

THE FLANS

Despite their often irregular appearance the flans of Greek coins were carefully prepared; this was indeed necessary, for their weight had to be adjusted before striking, since upon the precise weight of metal in the finished coin depended its value. The flans would then be heated before striking in order to take the imprint of the dies more easily; if they were not sufficiently heated they were liable to split under the impact (as no. 592, Pl. 178); such accidental fissures must be distinguished from the deliberate chisel cuts often applied to Greek coins in the Near East to ensure that they were not plated. In the act of striking there was no collar to hold the flan in alignment with the dies, so that the types were often imprinted eccentrically. Likewise there was no device such as milling to check clipping; the rarity of clipping would seem to imply that most coins normally passed by weight rather than at a face value taken on trust. To judge from the weights of well-preserved coins Greek mints could maintain very high standards of accuracy, particularly in gold and electrum; in silver coinages the weights of the smaller denominations tend to be less regular than those of the larger.

For its coinages the Greek world used many weight standards, of which some had only local importance. The more widely used are listed below:

Aeginetan:	stater	12.0 gm.;	drachma	6.0 gm.
(Euboeic-) Attic:	tetradrachm	17.2 gm.;	drachma	4.3 gm.
Corinthian:	stater	8.6 gm.;	drachma	2.8 gm.
Achaean (South Italy):	stater	8.0 gm.;	drachma	2.7 gm.
Lydian (Persian):	double siglos	11.0 gm.;	siglos	5.5 gm.
Rhodian (Chian):	tetradrachm	15.3 gm.;	drachma	3.8 gm.
Phoenician:	shekel	14.0 gm.;	half-shekel	7.0 gm.

The names by which these standards are now known are usually derived from the principal coinages to use them; they are not necessarily a reliable guide to the origin of the standard, since such standards often came to be applied to coinage only at a comparatively late date.

These standards were used approximately as follows:

Aeginetan: most of the Greek peninsula and the Peloponnese; Aegean islands and Crete.

(Euboeic-) Attic: Euboea, Athens, Sicily, Cyrene, and many places in the Aegean under Athenian influence; after its adoption by Alexander the Great for his imperial coinage, it was commonly used for both gold and silver over the whole of the eastern Mediterranean and Near East.

Corinthian: Corinth and Corinthian colonies in north-west Greece.

Achaean: Achaean colonies in South Italy.

Lydian (Persian): Lydia, whence adopted by the Persians; common in south and south-west Asia Minor.
Rhodian (Chian): Rhodes and Chios, and popular in the Aegean in the fourth century.
Phoenician: mainly Phoenicia, but also in Thrace, Macedonia and a number of places in western Asia Minor.

CHRONOLOGY

Apart from a few late regal issues Greek coins carry no dates, and the difficulty which this constitutes is reflected either in the wide and non-committal date brackets often employed, or in the divergent figures proposed by different authorities for the same coin. It is one of the principal tasks of Greek numismatics to narrow these brackets and to seek for evidence upon which reliable chronologies can be based. This evidence can be of several kinds, and it is often necessary to apply converging lines of argument to obtain a firm date for a given coin.

An obvious, but often unsatisfactory, method of dating is by style; in essence, this means the application to coinage of criteria derived from other fields of art such as vase-painting or sculpture. Within wide limits dating by style is unlikely to be seriously misleading, but it can rarely give dates of the required precision unless supported by other forms of evidence. For this there are several reasons. One is that artistic criteria are largely based on human forms, which provide no basis for judging the date of such types as a turtle or a lyre. Another is that coinage contains a strong heraldic element which tends to retard stylistic development; an apprentice sculptor is clearly under much less artistic restraint than a die-engraver reproducing a traditional design. Again, not all coins are first-class works of art, which bear the stamp of the artistic innovations of each period; these lesser works will lack the characteristic features upon which stylistic chronology is founded. For these and other reasons, dates based upon style must be supported, wherever possible, by other forms of evidence.

Most securely dated are those coins which can certainly be associated with a known set of historical circumstances. The largest group are those regal coins of which the dates of the issuing rulers are known, but this source of evidence is comparatively insignificant before the Hellenistic period. For the earlier centuries there are comparatively few coins which can be pinpointed in time; a notable example is the coinage of the Samian refugees at Zancle (no. 613, Pl. 182). Somewhat less exact, but still useful, are the dates of the first or last coinages of a city, which can be deduced from the known dates of its foundation or destruction, though clearly there will be a margin of error at either end, if coining did not start immediately after foundation or continue up to the date of destruction.

Another line of approach is through the reconstruction of the detailed history of a mint, especially by means of die analysis. In favourable instances this can result in the quite certain determination of the sequence of issues, and even of individual dies. This fixed sequence, by restricting the room for re-arrangement, may lead to a fairly exact date for each issue, even though very few dates in the local history may be available from other sources.

Finally, a number of secondary sources of chronological information must be mentioned, even though they often contribute relative rather than absolute dates. On some occasions Greek mints, instead of preparing new flans, simply restruck old coins with new types (*e. g.* no. 660, Pl. 191); in this process the original types were usually only partially obliterated, so that enough may survive to allow identification. In such cases a relative chronological sequence is established between two types, for the undertype must be earlier than the overtype, though, of course, the period of time which elapsed between the original minting and the restriking may be quite uncertain. Similar information is provided by imitations. In some areas a particular coinage was so predominant that its types or elements from them were copied at less established mints; this happened with Syracusan coinage in Sicily and with Athenian coinage in the eastern Mediterranean. As with overstrikes, the chronological implications may be somewhat uncertain; a general copy of a type which itself underwent little change may be

unhelpful, whereas a copy of a short-lived feature may bring precision to a previously vague date. Hoards, too, provide their quota of chronological information. Degrees of wear may differentiate between the older and the more recent issues, and the presence of a coin of known date may carry implications about the dates of otherwise undated coins associated in the same find.

Chronological evidence is cumulative; the date of a coin or an issue, once established, is not an isolated fact, for it has a bearing on the dates of other coins, through similarities in style or fabric, through overstrikes, through imitation, or through association in hoards or other finds. Through this complicated series of inter-relationships a chronology of Greek coinage is gradually being assembled, which is not only generally sound, but is increasingly accurate in detail.

OCCASIONS OF ISSUE

Very few ancient mints can have produced coinage with the annual regularity with which we are familiar today. Since regular production depends upon a regular supply of metal, only mints with such a supply coined at all frequently, and these were necessarily few, confined for the most part to places such as Athens and Macedon, which had sources of silver under their direct control. Elsewhere the reasons which led to the minting of coins in one year rather than another are often lost to us, but it is well to remember that possession of a mine or direct trade with a mining area were not the only sources from which a stock of silver could be obtained. There were reparations exacted from defeated enemies, or tribute imposed on subject allies; there were the proceeds of loot or piracy; the accumulated wealth of temples or of private citizens could be tapped by taxes or loans. These are the theoretical sources, though they can be identified only rarely in particular cases. Some of the great Syracusan issues of the early fifth century were surely coined from the indemnity imposed on the Carthaginians in 480 BC, and the captured treasures of the Persian Empire certainly made possible the great coinages of Alexander the Great. In the special case of the Delphic coinage of 336 BC (nos 462, 463, Pl. 147) we know from inscriptions that the metal was obtained by melting down miscellaneous coinage in the temple treasury. Often the purpose of coinage must have been the payment of troops or the hiring of mercenaries, and this military purpose is sometimes made explicit by either types or inscriptions. Other coinages may have served as advertisements, or have been simply expressions of civic pride, for many were prepared with a care and skill which far exceeds any strictly utilitarian need.

HOARDS AND THE SURVIVAL OF ANCIENT COINAGE

Coins are found on nearly every site which belonged to a coin-using culture, but single pieces from houses or market-places are usually casual losses of small change, though even these may have great evidential value for the chronology of the site or the economic history of the area. Nearly all the larger denominations which survive—and probably the majority of the smaller as well—come from hoards which were buried in some secret place for safety, and never recovered. In ages which lacked banks or systems of credit, wealth was held in the form of hard cash, which each owner protected as best he could until he was ready to use it. Such concealment was universal, and in times of settled peace hoards were normally recovered and used in due course; but in war or invasion the number of owners unable to retrieve their property would be much higher. Indeed, almost every surviving hoard must be the result of violence or sudden death, and a concentration of hoards in one period or place is good evidence for unsettled and insecure times.

The contents of hoards are of many different patterns. First, there are those which contain the coins of one mint only; unless the mint is one which, like Athens, normally exported its coinage far afield, such a hoard will probably be found quite close to the mint of origin, and may even serve to indicate the area of an otherwise unlocated mint. A variation of this pattern occurs in hoards which contain coins from a number of mints all within an area such as Sicily or South Italy; such accumulations clearly result from a local trade within the area, even though the metal may originally have been imported from without. More mixed hoards with coins from several areas are usually the result of the sort of international trade which developed in the Hellenistic period, though the frequency of operations of booty or piracy must not be overlooked. A few hoards are clearly not commercial: for example, coins dedicated in temples, and the few Greek coins that were sealed in the foundation deposit of Darius I at Persepolis.

A special class is formed by those hoards of Greek coins found in the Near East; they are characterized by the extreme variety of their contents, and by their often mutilated condition. No doubt usually brought together through trade with the Greek world, these hoards are, in fact, simply collections of bullion, in which coins or fragments of coins may be accompanied by ingots or jewelry.

Of the total volume of Greek coins originally struck only a minute fraction survives today; this fraction, moreover, varies from area to area and period to period in accordance with the incidence of hoards. Where hoards have been relatively large and numerous, as in Sicily, we can claim with some confidence to possess a record of practically all the dies employed, so that, by counting these dies, we can determine the relative sizes of different coinages; elsewhere the surviving sample may be so defective that a single hoard can restore a whole series of issues hitherto unknown, as has recently happened in Lycia (nos 655–660, Pls 190, 191). Hoards are also responsible for the very unequal survival of coins produced originally in roughly equal quantities: issues struck from single pairs of dies sometimes survive in one unique specimen and sometimes in very many identical examples.

Though the majority of our surviving coins come from hoards, only gradually is the importance of fully recording such hoards becoming realized, and many discovered by chance in remote places are still dispersed before any adequate record of them can be made. Had more finds of coins been even summarily recorded in the past, it is safe to say that our knowledge and understanding of Greek coinage would be vastly greater than it is today. Hoards provide vital information on the movement or immobility of different coinages; a study of degrees of wear gives a clue to the succession of issues, and the varying composition of hoards buried at successive dates can permit the construction of a detailed scheme of chronological relationships between mints. One of the most useful tools of the Greek numismatist is S. P. Noe's *Bibliography of Greek coin hoards* (2nd ed.), though many hoards have been found since it was published in 1937. Year by year the number of adequately recorded hoards is increasing and bringing thereby a greater precision to the study of Greek coinage.

THE STUDY OF GREEK COINAGE

Greek coins have been collected and studied in an unsystematic way for several centuries, but it is only comparatively recently that new methods of study have demonstrated the enormous contribution that Greek coinage can make to our knowledge of the ancient world. Through the careful analysis of hoards and the painstaking reconstruction of die sequences the whole chaotic mass of Greek coinage is gradually being arranged with an objective precision which is hardly possible in any other field. Much has still to be done, though important results have already been achieved. The attainment of this accurate chronological classification is the primary task of Greek numismatics today, for, until it is achieved, no full and reliable use can be made of the information which Greek coinage provides.

This information is extremely varied, and for some branches of study it is the only available source; a few examples must suffice. Many rulers are known only from their coins, and of many others already known to history we possess no likenesses apart from their coins; the Indo-Greek kings of Bactria (nos 777–780, Pl. 212) provide many notable instances. For economic history the coins are a primary source and the only continuous one: from them we learn of weight-standards, of denominations, and of circulation. To the student of religion coinage offers an inexhaustible series of pictures of deities, of their attributes and of their cult-images, as well as illustrations of the religious propaganda of the Hellenistic monarchies. To political history coinage also makes its contribution, recording alliances or the subjection of one state to another. Finally, the artistic value of Greek coins is self-evidently deserving of study for its own sake alongside and in relation to the many other manifestations of the Greek genius. Nearly all Greek coins are works of great beauty and consummate skill, as the plates of this volume amply testify; but they were also objects officially produced and intended for the precise measurement of wealth. It is perhaps in this combination of the supremely artistic and the strictly utilitarian that lies their peculiar fascination.

THE GREEK ALPHABET

Ionic Capitals	Archaic Forms	Local Variants	Greek Names	English Equivalents
<i>A</i>	Α		alpha	a
<i>B</i>		Υ (at Byzantium)	beta	b
<i>Γ</i>	Γ, Γ		gamma	g
<i>Δ</i>	Δ		delta	d
<i>E</i> ¹	Ε		epsilon	ě
	Ϝ	Ϛ (in Crete)	digamma	v
<i>Z</i>	Ζ		zeta	z
<i>H</i>	Η		eta	ē
<i>Θ</i>	Θ		theta	th
<i>I</i>	Ι		iota	i
<i>K</i>			kappa	k
<i>Λ</i>	Λ		lambda	l
<i>M</i>	Μ	μ (at Melos)	mu	m
<i>N</i>	Ν		nu	n
<i>Ξ</i>	Ξ, Χ		xi	x
<i>O</i> ²		Ο (at Melos)	omicron	ō
<i>Π</i>	Π	Ϙ (in Crete)	pi	p
	Ϟ		koppa	q
<i>P</i>	Ρ, Ϙ		rho	r
<i>Σ</i>	Σ	Μ (in S. Italy)	sigma	s
<i>T</i>			tau	t
<i>Υ</i>	Υ		upsilon	u
<i>Φ</i>		Θ? (at Phocaea)	phi	ph
<i>Χ</i>	Ψ		chi	kh
<i>Ψ</i>	Ψ		psi	ps
<i>Ω</i>			omega	ō
	Η		heta	h

¹ In archaic scripts epsilon was used for both ě and ē.

² In archaic scripts omicron was used for both ō and ō.

SICILY



NAXOS

1, 2, 3 c. 530–510 BC – 4, 5 c. 510–490 BC.

Obv. Dionysus. *Rev.* Vine-branch and grapes (x2, except no. 3, x4)



6 O.



7 O.

NAXOS

6, 7 c. 460 BC.

Obv. Dionysus. *Rev.* Silenus (x4)



6 R.



6 R.



8 O.



10 O.



10 R.



9 R.

NAXOS

- 8 c. 430–420 BC. *Obv.* Dionysus (x4)
 9 c. 430–420 BC. *Rev.* Silenus (x4)
 10 c. 420–403 BC. *Obv.* Dionysus.
Rev. Vine-branch (x4)



11

12

NAXOS

11 c. 420–403 BC. *Obv.* Apollo. *Rev.* Silenus (x4) – 12 c. 420–403 BC. *Obv.* Dionysus. *Rev.* Silenus (x4)



13



14 R.



17

15

16

LEONTINI

13, 15, 16 c. 485–466 BC. *Obv.* Quadriga. *Rev.* Lion's head and barley grains (x2)14 c. 485–466 BC. *Rev.* Lion's head and barley grains (x4)17 c. 485–466 BC. *Obv.* Bearded, naked horseman. *Rev.* Lion's head and barley grains (x2)



18 R.



18 O.



19 O.

LEONTINI

18, 19 c. 479 BC.

Obv. Quadriga (x2). Rev. Apollo (x4)

20, 21 c. 466-460 BC - 22 c. 460-450 BC.

Obv. Apollo. Rev. Lion's head and barley grains
(x2, except nos 20 O. and 22 O., x4)



19 R.



20 R.



20 O.



21



22 R.



22 O.



23 O.



23 R.

LEONTINI

23 c. 460–450 BC

24 c. 450 BC.

Obv. Apollo (x4). *Rev.* Lion's head and
barley grains (x2)



24 R.



24 O.



25



26 R.

26 O.



LEONTINI

- 25 c. 440 BC. *Obv.* Apollo. *Rev.* Lion's head (x4)
 26 c. 425 BC. *Obv.* Apollo (x4). *Rev.* Lion's head (x2)
 27 c. 425 BC. *Obv.* Lion's head. *Rev.* River god (x4)



28 O.



29



30 O.



31 O.



31 R.



PLATE II AETNA

33 c. 475-470 BC. *Obv.* Silenus (x4). *Rev.* See Plate 11

◁ CATANA

28, 30 c. 460-450 BC. *Obv.* Man-faced bull (x4 and x2)

29 c. 460-450 BC - 31 c. 460 BC. *Obv.* Man-faced bull. *Rev.* Nike (x2, except no 31 R., x4)

CATANA

- 32 c. 460–450 BC. *Obv.* Man-faced bull (x2).
Rev. Nike (x4)

AETNA

- 33 c. 475–470 BC. *Obv.* See Plate II. *Rev.* Zeus (x4)
34 c. 470 BC. *Obv.* Silenus. *Rev.* Thunderbolt (x4)



32 O. 32 R.



33 R. 34



35 R.



35 O.



36 O.



36 R.

CATANA

35, 36 c. 450-440 BC.

Obv. Quadriga (x2). Rev. Apollo (x4)

37 c. 430 BC. Rev. Apollo (x4)

38, 39 c. 415 BC. Obv. Quadriga (x2). Rev. River-god Amenanos (x4)



37 R.

38 O.



R.



39 O.



39 R.



40 O.



41 R.



42 O.



42 R.

CATANA

40 c. 410–403 BC. *Obv.* Quadriga (x2)

41 c. 410–403 BC. *Rev.* Amenanos (x4)

42 c. 410–403 BC. *Obv.* Quadriga (x4). *Rev.* Apollo (x2)



PLATE III CATANA

44 c. 410–403 BC. *Obv.* Apollo, signed by Heracleidas (x4)



43 R.



43 O.

CATANNA

43 c. 410–403 BC. *Obv.* Apollo (x4). *Rev.* Quadriga (x2)

45 c. 420 BC. *Obv.* Silenus. *Rev.* Thunderbolt (x4)

46 c. 420–410 BC. *Obv.* Silenus (x4)

47 c. 410 BC. *Rev.* Amenanos (x4)



46 O.



47 R.



45



49

48 O.

ZANCLE

48 c. 510 BC. *Obv.* Dolphin in harbour (x4)

49 c. 500 BC. *Obv.* Dolphin in harbour. *Rev.* Shell in incuse pattern (x2)

MESSANA

50 c. 489-480 BC. *Obv.* Lion's head. *Rev.* Calf's head (x2)

51 c. 480-460 BC. *Obv.* Biga of mules (x4)

52 c. 460 BC. *Rev.* Hare (x2)



50



51 O.



52 R.

ZANCLE

53 c. 460 BC.

Obv. Zeus and altar (x4).
Rev. Dolphin and shell (x2)



53 R.

MESSANA

54 c. 430-410 BC.

Obv. Biga of mules.
Rev. Hare and dolphin (x2)

55 c. 430-410 BC.

Obv. Biga of mules (x4).
Rev. Hare and corn ear (x2)



55 R.



53 O.



54



55 O.



- 56
MESSANA
56 c. 430–410 BC. *Obv.* Biga of mules. *Rev.* Hare and dolphin (x4)
57 c. 420–410 BC. *Obv.* Biga of mules. *Rev.* Pan with hare (x2)
58 c. 410–396 BC. *Obv.* Biga of mules. *Rev.* Hare and male head (x2)



57



58



60



61



59

MESSANA
59, 60, 61 c. 410–396 BC. *Obv.* Biga of mules. *Rev.* Hare (x2, except no. 59, x4)



62 O.

HIMERA

- 62 c. 520–500 BC. *Obv.* Cock (x4)
 63 c. 520–500 BC. *Obv.* Cock. *Rev.* Incuse square (x2)
 64 c. 500 BC. *Obv.* Cock. *Rev.* Hen (x2)
 65 c. 480–470 BC. *Obv.* Cock. *Rev.* Crab (x2)
 66 c. 470–450 BC. *Obv.* Horseman. *Rev.* Nymph Himera (x4)

63



64



65



66



HIMERA

- 67 c. 460–450 BC.
Obv. Pelops in biga.
Rev. Nymph Himera
 (x4)
- 68 c. 440–430 BC.
Rev. Nymph Himera
 sacrificing (x4)



69 R.



70 O.

HIMERA

69 c. 440–430 BC. *Rev.* Nymph Himera sacrificing (x4)

70 c. 440–430 BC. *Obv.* Quadriga (x2)

71 c. 410 BC. *Obv.* Quadriga (x2).

Rev. Nymph Himera sacrificing (x4)



71 R.



71 O.



73

SYRACUSE

72 c. 510 BC. *Obv.* Quadriga. *Rev.* Arethusa in incuse square (x4)73 c. 510 BC. *Obv.* Horseman with second horse. *Rev.* Arethusa in incuse square (x4)



74 R.



74 O.



75 O.



75 R.

SYRACUSE
74, 75 c. 500–490 BC.
Obv. Quadriga (x2). Rev. Arethusa (x4)



SYRACUSE

76 c. 485 BC. *Obv.* Quadriga. *Rev.* Arethusa (x4) – 77 c. 485 BC. *Obv.* Horseman with second horse. *Rev.* Arethusa (x4)



SYRACUSE

78 480-479 BC. *Obv.* Quadriga; lion below (x4)

79 Plate I (frontispiece)



SYRACUSE
80 480-479 BC. *Rev.* Arethusa (x4)



81 R.

82

SYRACUSE

81 c. 470–460 BC. *Rev.* Arethusa (x4) – 82 c. 470–460 BC. *Obv.* Arethusa. *Rev.* Octopus (x4)
83 c. 470–460 BC. *Obv.* Quadriga. *Rev.* Arethusa (x4)





84 R.



85



86 R.



87 R.



88 R.

SYRACUSE

84 c. 460 BC. *Rev.* Arethusa (x4) – 85 c. 460 BC. *Obv.* Quadriga. *Rev.* Arethusa (x2) – 86, 87, 88 c. 460 BC. *Rev.* Arethusa (x2, except no. 88, x4)



89 R.



90 R.



91 R.



92 R.



93 O.



93 R.



94 R.

SYRACUSE

89, 90, 91 c. 450 BC

92 c. 440 BC.

Rev. Arethusa (x2, except no. 89, x4)

93 c. 440 BC.

Obv. Quadriga (x2). *Rev.* Arethusa (x4)

95 R.



SYRACUSE

94, 95 c. 430 BC – 96, c. 425 BC.

Rev. Arethusa (x4, except no. 95, x2)

96 R.



97



98 R.

SYRACUSE

97, 100 c. 425–413 BC. *Obv.* Quadriga. *Rev.* Arethusa (x2)

98, 99 c. 425–413 BC. *Rev.* Arethusa (x4)



99 R.



100



SYRACUSE

101 c. 415 BC. *Obv.* Quadriga. *Rev.* Arethusa (x4)102 c. 415 BC. – 103 c. 413 BC. *Rev.* Arethusa (x4)

102 R.

103 R.



SYRACUSE

104 c. 395–380 BC.

Obv. Quadriga. Rev. Arethusa (x3)



SYRACUSE

105 c. 395–380 BC. *Rev.* Arethusa (x4)



SYRACUSE
106 c. 395–380 BC. *Rev.* Arethusa (x4)



SYRACUSE
107 c. 412 BC.
Obv. Quadriga. *Rev.* Arethusa (x4)



109 R.



108



110 R.

SYRACUSE

108 c. 412-400 BC. *Obv.* Arethusa.
Rev. Quadriga (x2)

109 c. 412-400 BC. *Rev.* Quadriga (x4)

110 c. 412-400 BC. *Rev.* Arethusa (x4)



PLATE IV SYRACUSE

111 c. 412-400 BC. Rev. Athena, signed by Eucleidas (x5)



112 R.



114 R.



113



115



SYRACUSE

112 c. 412-400 BC. *Rev.* Athena (x4)

113, 115 c. 412-400 BC. *Obv.* Quadriga. *Rev.* Arethusa (x2)

114 c. 412-400 BC. *Rev.* Arethusa (x2)



SYRACUSE
116 c. 405 BC. *Obv.* Quadriga (x4)



SYRACUSE
117 c. 405 BC. *Rev.* Arethusa (x4)



SYRACUSE
118 c. 405 BC. *Rev.* Arethusa (x4)



PLATE V SYRACUSE

119 c. 405 BC. *Rev.* Arethusa, signed by Cimon (x5)



120 R.



SYRACUSE
120, 121 c. 405 BC. *Rev.* Arethusa (x3)

121 R.



SYRACUSE
122 c. 412-400 BC.
Obv. Arethusa.
Rev. Quadrige (x4)



123 O.

23 R.



124 O.



124 R.

SYRACUSE

23 c. 412-400 BC.

Obv. Arcthusa (x2). Rev. Quadriga (x4)

24 c. 400 BC.

Obv. Quadriga (x2). Rev. Arcthusa (x4)



125



126



127



128 O.



130



SYRACUSE

- 125 c. 414 BC, gold. *Obv.* Heracles. *Rev.* Arethusa (x4) – 126 c. 390–380 BC, gold. *Obv.* Male head. *Rev.* Horse (x4)
 127 c. 390–380 BC, gold. *Obv.* Arethusa. *Rev.* Heracles and lion (x4) – 128 c. 390–380 BC, gold. *Obv.* Arethusa (x4)
 130 c. 300 BC, electrum. *Obv.* Apollo. *Rev.* Artemis (x4)



PLATES VI, VII SYRACUSE
 129 c. 390–380 BC, gold. *Obv.* Arethusa, signed by Euaenetus.
Rev. Heracles wrestling with lion (x5)



131

SYRACUSE

- 131 c. 300 BC, electrum. *Obv.* Apollo. *Rev.* Tripod (x4) – 132 c. 310 BC. *Obv.* Athena. *Rev.* Pegasus (x4)
 133 c. 340 BC, gold. *Obv.* Zeus. *Rev.* Pegasus (x4)



132



133

SYRACUSE

134 AGATHOCLES. 317-289 BC.

Obv. Arethusa (x4). *Rev.* Quadriga (x2)

135, 136 AGATHOCLES. *Obv.* Persephone (x2)

137 AGATHOCLES, *Rev.* Nike and trophy (x4)



134 O.



134 R.

135 O.



136 O.



137 R.



140 O.



141 O.



SYRACUSE

138 HICETAS, 288–279 BC, gold. *Obv.* Persephone. *Rev.* Nike in biga (x4)

139 HIERON II, 275–215 BC, gold. *Obv.* Persephone. *Rev.* Biga (x4)

140, 141 PHILISTIS, wife of Hieron II. *Obv.* (x4)



142 O.



142 R.

SYRACUSE

- 142 HIERON II, 275–215 BC.
Obv. Hieron (x4). *Rev.* Nike in biga (x2)
- 143 GELON II, 241–216 BC.
Obv. Gelon. *Rev.* Nike in biga (x4)
- 144 HIERONYMUS, 215–214 BC.
Obv. Hieronymus. *Rev.* Thunderbolt (x2)
- 145 214–212 BC.
Obv. Zeus (x4). *Rev.* Nike in quadriga (x2)



144



43



145 O.



145 R.



146



147 R.

CAMARINA

146 c. 490–484 BC.

Obv. Helmet on shield.

Rev. Palm-tree and greaves (x4)

147 c. 420 BC.

Obv. Athena in quadriga (x4).

Rev. Heracles (x2)



148 O.



148 R.



149 R.



149 O.

CAMARINA
 148, 149 c. 415-405 BC.
 Obv. Athena in quadriga (x2).
 Rev. Heracles (x4)



150 O. 151 R.



150 R.

CAMARINA

- 150 c. 410 BC. *Obv.* River-god (x4). *Rev.* Camarina on swan (x2)
- 151 c. 410 BC. *Obv.* River-god (x2). *Rev.* Camarina on swan (x4)
- 152 c. 415–405 BC. *Obv.* Quadriga (x4)
- 153 c. 410 BC, gold. *Obv.* Athena. *Rev.* Olive sprig (x4)



151 O.



152 O.



153

154

GELA

- 154 c. 480 BC. *Obv.* Horseman. *Rev.* Man-faced bull (x2)
 155, 156 c. 495-480 BC. *Obv.* Horseman. *Rev.* Forepart of man-faced bull (x4)



155

156



157



158 O.



158 R.



159



158 R.
159 R.

161 R.
163 R.

GELA

57 c. 470 BC - 158 c. 460 BC. *Obv.* Quadriga. *Rev.* Forepart of man-faced bull (x2 and x4) - 159 c. 450 BC. *Obv.* Quadriga. *Rev.* Nymph crowning man-faced bull (x2) - 160, 161, 162 c. 420 BC. Forepart of man-faced bull (x4) - 163 c. 410 BC. *Rev.* Man-faced bull (x4)



164 O.



164 R.



165 R.



166 R.

GELA

164 c. 420 BC.

Obv. Quadriga (x2). *Rev.* River-god Gelas and fish (x4)

165, 166 c. 420 BC.

Rev. River-god Gelas and fish (x2)

167 c. 405 BC, gold.

Obv. Horseman. *Rev.* Man-faced bull (x4)





168 R.



169 O.



169 R.



171 R.



172 R.



170

ACRAGAS

168 c. 520-500 BC. Rev. Crab (x2) - 169 c. 480 BC. Obv. Eagle. Rev. Crab (x2)

170 c. 460-420 BC. Obv. Eagle. Rev. Crab (x4) - 171, 172 c. 460-420 BC. Rev. Crab (x2)



173 O.



174 R.



175 O.



175 R.

ACRAGAS

- 173 c. 420–415 BC. *Obv.* Eagle on hare (x4)
 174 c. 420–415 BC. *Rev.* Crab and fish (x2)
 175 c. 420–415 BC. *Obv.* Two eagles on hare (x2).
Rev. Scylla and crab (x4)
 176, 177, 178 c. 413–411 BC.
Obv. Quadriga. *Rev.* Two eagles on hare
 (x2, except no. 177, x4)



176



177 O.



177 R.



178



ACRAGAS
179 c. 412-411 BC. *Obv.* Quadriga (x4)



ACRAGAS

179 c. 412-411 BC. *Rev.* Two eagles on hare (x4)



180 O.



180 R.

ACRAGAS

- 180 c. 409–408 BC. *Obv.* Quadriga (x4).
Rev. Two eagles on hare (x2)
 181 c. 408–407 BC. *Obv.* Quadriga (x4).
Rev. Two eagles on hare (x2)



181 R.



181 O.



182



183

ACRAGAS

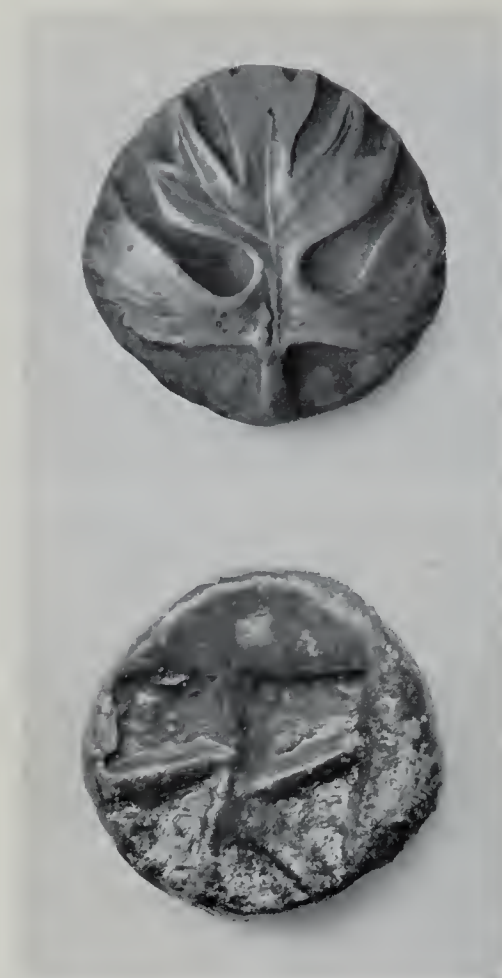
182 c. 413–406 BC. *Obv.* Eagle and snake. *Rev.* Crab and fish (x4) – 183 c. 413–406 BC. *Obv.* Two eagles on hare. *Rev.* Crab and prawn (x4)



186 O.



186 R.



184



185

SELINUS

184 c. 520 BC – 185 c. 500 BC.

Obv. Wild parsley leaf. Rev. Incuse square (x2)

186 c. 467–445 BC.

Obv. Apollo and Artemis in quadriga.

Rev. River-god Selinus sacrificing (x4)



187

SELINUS

187 c. 460–450 BC.

Obv. Heracles taming bull.*Rev.* River-god Hypsas sacrificing (x4)

188 c. 445–435 BC.

Obv. Apollo and Artemis in quadriga (x2).*Rev.* River-god Selinus sacrificing (x4)

188 O.



188 R.



189 R.



191 O.

SELINUS

- 189 c. 417–409 BC.
Rev. River-god Selinus sacrificing (x4)
- 190 c. 420 BC.
Obv. Apollo and Artemis in quadriga.
Rev. River-god Selinus sacrificing (x2)
- 191 c. 410 BC.
Obv. Quadriga (x4)



190

ERYX

- 192 c. 400–390 BC.
Obv. Quadriga. Rev. Aphrodite (x3)
- 193 c. 400 BC.
Obv. Hound. Rev. Aphrodite (x3)

PANORMUS

- 194 c. 420 BC.
Obv. Hound. Rev. Female head (x4)
- 195 c. 400 BC.
Rev. Arethusa (x2)

RASH MELCARTH

- 196 c. 375 BC.
Obv. Quadriga. Rev. Arethusa (x2)



192



193



194



195 R.



196





197 R.



198 R.



199



SEGESTA

197 c. 480 BC.

Rev. Nymph (x4)

198 c. 460 BC.

Rev. Nymph (x4)

199 c. 460 BC.

Obv. Hound.

Rev. Nymph (x4)

200 c. 410 BC.

Obv. Hound (x2)

201 c. 405 BC.

Rev. Nymph (x2)



200 O.



201 R.



204 R.

SEGESTA

- 202 c. 410 BC. *Obv.* River-god and hound.
Rev. Nymph Segesta sacrificing (x2)
203 c. 405 BC. *Obv.* Young huntsman.
Rev. Nymph Segesta (x4)
204 c. 405 BC. *Rev.* Nymph Segesta (x2)

S R.





205



206 O.



206 R.



207 O.



207 R.

SICULO-PUNIC

- 205 c. 390–380 BC. *Obv.* Horse. *Rev.* Palm-tree (x2) – 206 c. 350 BC. *Obv.* Arethusa (x4). *Rev.* Horse's head and palm-tree (x2)
 207 c. 360 BC. *Obv.* Female head (x4). *Rev.* Lion and palm-tree (x2)



208 O.



208 R.



209 R.



209 O.

SICULO-PUNIC

208 c. 340 BC – 209 c. 360 BC.

Obv. Female head (x4).

Rev. Lion and palm-tree (x2)



210



211

SICULO-PUNIC

210 c. 260–240 BC, gold. *Obv.* Persephone. *Rev.* Horse (x2.5) – 211 c. 270–260 BC. *Obv.* Persephone. *Rev.* Pegasus (x2.5)

SOUTH ITALY
GAUL
HISPANIA

SYBARIS

212 c. 550-530 BC.
Obv. Bull (x4). *Rev.* Bull incuse (x2)



212 R.



212 O.

AMI (ASI)
 213 c. 550-530 BC.
Obv. Bull (x4). *Rev.* Bull incuse (x2)



213 O.



213 R.

SIRINOS AND
PYXUS

214 c. 550–530 BC.
Obv. Bull (x4)



214 O.



215 O.



216

LAUS

215 c. 490 BC.

Obv. Human-headed bull
(x4)

216 c. 470–460 BC.

Obv. Man-faced bull.
Rev. Man-faced bull (x2)



PLATE VIII POSEIDONIA
219 c. 530 BC. *Obv.* Poseidon (x5)

POSEIDONIA

- 217 c. 510 BC.
Obv. Poseidon (x4)
218 c. 520 BC.
Obv. Poseidon (x4).
Rev. Poseidon incuse (x2)



217 O.



218 O.



218 R.



220 O.

POSEIDONIA

220 c. 500 BC. *Obv.* Poseidon (x4). *Rev.* Poseidon incuse (x2)

221 c. 425 BC – 222 c. 350 BC. *Obv.* Poseidon (x4). *Rev.* Bull (x2)



220 R.



221 R.



222 R.



221 O.



222 O.

PALINURUS AND MOLPA

223 c. 530–570 BC.

Obv. Boar (x4). Rev. Boar incuse (x2)

SERDAIOI

224 c. 520 BC.

Obv. Dionysus. Rev. Vine-branch and grapes (x4)



223 O.



223 R.



224

HYELE

225 c. 480 BC. *Obv.* Lion. *Rev.* Nymph Hyele (x4)

226 c. 350 BC. *Obv.* Athena (x4)

227 c. 280–260 BC. *Obv.* Athena. *Rev.* Lion attacking stag (x4)



225



226 O.



227





228 R.



228 O.



229 O.



229 R.

METAPONTUM

228 c. 550-530 BC - 229 c. 520-510 BC.

Obv. Ear of barley (x4). Rev. Ear of barley incuse (x2)



231 R.



230 R.



232 R.



233 O.



234 O.



234 R.



235 O.



235 R.

METAPONTUM

230 c. 450 BC. *Rev.* Achelous (x2) – 231 c. 450 BC. *Rev.* Heracles (x2) – 232 c. 450 BC. *Rev.* Apollo (x2) – 233 c. 420–400 BC. *Obv.* Apollo Carneius (x4) – 234 c. 430 BC. *Obv.* Heracles (x4). *Rev.* Ear of barley (x2) – 235 c. 420–400 BC. *Obv.* Female head. *Rev.* Ear of barley (x2) – 236, 237, 238, 239 c. 400–380 BC. *Obv.* Female head (x4 and x2) – 240 c. 350 BC. *Obv.* Apollo (x4) – 241 c. 350 BC. *Obv.* Dionysus (x4). *Rev.* Ear of barley (x2)



236 O.



237 O.



238 O.



241 R.



239 O.



240 O.



241 O.



242 O.



243 O.

METAPONTUM

242 c. 330-300 BC. *Obv.* Leucippus (x4). *Rev.* Ear of barley (x2) - 243 c. 330-300 BC. *Obv.* Leucippus (x4) - 244, 245 c. 334-320 BC, gold. *Obv.* Nike. *Rev.* Ear of barley (x4) - 246 c. 330-300 BC. *Obv.* Zeus (x4). *Rev.* Ear of barley (x2) - 247 c. 330-300 BC. *Obv.* Demeter (x4). *Rev.* Ear of barley (x2) - 248 c. 300 BC. *Obv.* Heracles (x4). *Rev.* Ear of barley (x2) - 249 c. 330-300 BC. *Obv.* Demeter (x4). *Rev.* Ear of barley (x2)



242 R.



244



245 O.



246 O.



247 O.



246 R.



247 R.



249 R.



248 R.



248 O.



249 O.



250 O.



251

THURIUM

250 c. 415–400 BC. *Obv.* Athena (x4) – 251 c. 415–400 BC. *Obv.* Athena. *Rev.* Bull (x4)

THURIUM

252 c. 375 BC. *Obv.* Athena (x4). *Rev.* Bull (x2)

253 c. 350 BC. *Obv.* Athena (x4)



252 O.

252 R.



253 O.



254 O.



254 R.



255



THURIUM
254 c. 330 BC. *Obv.* Athena (x4). *Rev.* Bull (x2)
HERACLEA
255 c. 375 BC. *Obv.* Athena. *Rev.* Heracles and lion (x4)



256 R.

256 O.



257



258 O.

258 R.



HERACLEA

256, 258 c. 350–330 BC – 257 c. 415–400 BC. *Obv.* Athena (x2). *Rev.* Heracles and lion (x4, except no. 257, x2)

CAULONIA

259 c. 530 BC – 260 c. 520–510 BC. *Obv.* Apollo (x4). *Rev.* Apollo incuse (x2)

259 R.



259 O.



260 O.



260 O.



261



262 O.



263 R.

CAULONIA

261 c. 455–440 BC. *Obv.* Apollo. *Rev.* Stag (x4) – 262 c. 420–410 BC. *Obv.* Apollo (x4) – 263 c. 400 BC. *Rev.* Stag (x4)



264 O.



264 R.



265



266

CROTON

264 c. 550–530 BC. *Obv.* Tripod (x4). *Rev.* Tripod incuse (x2)

265 c. 550–530 BC. *Obv.* Tripod. *Rev.* Eagle (x2)

CROTON AND SYBARIS

266 c. 500–490 BC. *Obv.* Tripod (Croton). *Rev.* Bull (Sybaris) (x2)



267 O.



267 R.



268 O.



269 R.



269 O.



268 R.

CROTON

- 267 c. 420 BC. *Obv.* Heracles (x2).
Rev. Tripod with Apollo
 and Python (x4)
 268 c. 400–380 BC. *Obv.* Eagle
 (x4). *Rev.* Tripod (x2)
 269 c. 400–380 BC. *Obv.* Eagle on
 stag's head (x4). *Rev.* Tripod
 (x2)



270 O.



271



270 R.



CROTON

270 c. 360 BC. *Obv.* Hera. *Rev.* Heracles (x4) – 271 c. 350 BC. *Obv.* Apollo. *Rev.* Heracles strangling snakes (x4)



272



273 R.



274 O.



274 R.

273 O.

TERINA

272 c. 480-460 BC. *Obv.* Nymph Terina. *Rev.* Nike (x4)

273 c. 440-430 BC. *Obv.* Nymph Terina (x4). *Rev.* Nike on hydria (x2)

274 c. 430 BC. *Obv.* Nymph Terina (x4). *Rev.* Nike (x2)



275



276

TERINA

275 c. 425–420 BC. *Obv.* Nymph Terina. *Rev.* Nike (x4) – 276 c. 425–420 BC. *Obv.* Nymph Terina. *Rev.* Nike on hydria (x4) – 277 c. 420–400 BC. *Obv.* Nymph Terina. *Rev.* Nike with bird (x4) – 278 c. 420–400 BC. *Obv.* Nymph Terina. *Rev.* Nike holding staff (x2) – 279 c. 420–400 BC. *Obv.* Nymph Terina (x2). *Rev.* Nike with wreath (x4) – 280 c. 380 BC. *Obv.* Nymph Terina (x2). *Rev.* Nike with bird (x4)



277



279 R.



278



279 O.



280 O.



280 R.

RHEGIUM

- 281 c. 480-460 BC.
Obv. Biga of mules. *Rev.* Hare (x2)
 282 c. 460-450 BC.
Obv. Lion's head. *Rev.* Iocastus seated (x4)
 283 c. 435-425 BC.
Rev. Iocastus seated (x2)
 284 c. 435-425 BC.
Obv. Lion's head (x2)
 285, 286 c. 435-425 BC.
Rev. Iocastus seated (x2)
 287 c. 435-425 BC.
Obv. Lion's head. *Rev.* Iocastus seated (x4)



281



282





288 R.



288 O.



290 O.



290 R.

RHEGIUM

288 c. 400 BC - 290 c. 356-351 BC.

Obv. Lion's head (x2). Rev. Apollo (x4)



PLATE IX RHEGIUM
289 c. 390 BC. *Rev.* Apollo (x5)



291



292 R.

292 O.



293 R.

293 O.

LOCRI

- 291 c. 380 BC. *Obv.* Zeus.
Rev. Eirene seated (x4)
 292 c. 330-300 BC. *Obv.* Zeus
 (x4). *Rev.* Eagle on hare (x2)
 293 c. 274 BC. *Obv.* Zeus (x4).
Rev. Pistis crowning Roma
 (x2)

TARAS

- 294 c. 500 BC. *Obv.* Taras on dolphin (x4).
Rev. Same type incuse (x2)
 295 c. 500 BC. *Obv.* Apollo (x4). *Rev.* Same
 type incuse (x2)
 296 c. 500 BC. *Rev.* Taras on dolphin incuse
 (x2)



294 O.



294 R.

295 R.



295 O.

296 R.





297



298

TARAS

297 c. 490 BC. *Obv.* Taras on dolphin. *Rev.* Hippocamp (x2) – 298 c. 480 BC. *Obv.* Seated oecist *Rev.* Taras on dolphin (x4)



299 R.



300 R.

TARAS

299 c. 480 BC – 300 c. 450 BC. *Rev.* Seated oecist (x4)

301 c. 470 BC. *Rev.* Male head (x4)

302 c. 460 BC. *Obv.* Taras on dolphin (x2). *Rev.* Female head (x4)

303, 305 c. 430–425 BC. *Obv.* Taras on dolphin (x2). *Rev.* Seated oecist (x4)

304 c. 420 BC. *Obv.* Taras on dolphin. *Rev.* Horseman (x2)



302 O.



301 R.



302 R.



303 O.



303 R.



304



305 O.



303 R.



305 R.



306



307



308

TARAS

306, 307, 308 c. 380-345 BC. *Obv.* Horseman. *Rev.* Taras on dolphin (x4, except no. 306, x2)



TARAS

309 c. 380-345 BC

310, 311 c. 344-334 BC.

Obv. Horseman. *Rev.* Taras
on dolphin (x4, except no.
310, x2)

310



TARAS

- 312 c. 344–334 BC. *Obv.* Horseman and Nike. *Rev.* Taras on dolphin (x2)
- 313 c. 334–332 BC. *Obv.* Horseman and squire. *Rev.* Taras on dolphin (x4)
- 314 c. 300 BC. *Obv.* Horseman. *Rev.* Taras on dolphin (x4)



312



313



314



PLATE X TARAS

315 c. 340-330 BC, gold. *Obv.* See Plate 109. *Rev.* The boy Taras appealing to his father Poseidon (x5)



PLATE XI TARAS

318 334-331 BC, gold, for Alexander, King of Epirus. *Obv.* Zeus of Dodona. *Rev.* See Plate 109



315 O.



316

TARAS

315 c. 340–330 BC, gold. *Obv.* Hera (x4) *Rev.* See Plate X

316 c. 340–330 BC, gold. *Obv.* Hera. *Rev.* Horseman (x2.5)

317 c. 340–330 BC, gold. *Obv.* Hera. *Rev.* Taras on dolphin (x4)

318 334–331 BC, gold, for Alexander of Epirus.

Obv. See Plate XI. *Rev.* Thunderbolt (x2)

319 c. 300 BC, gold. *Obv.* Hera. *Rev.* Horseman (x4)



318 R.



317



319





320 R.

320 O.

CUMAE

320 c. 440–421 BC. *Obv.* Nymph Cyme (x4). *Rev.* Mussel and barley grain (x2)

321 c. 440–421 BC. *Obv.* Nymph Cyme (x2). *Rev.* Scylla and mussel (x4)



321 O.



321 R.

NEAPOLIS

322 c. 415–400 BC. *Obv.* Athena. *Rev.* Man-faced bull (x2)

323, 324 c. 440–420 BC

325 c. 375 BC. *Obv.* Female head. *Rev.* Man-faced bull (x2)



322

323

324

325



326 O.



327



328 R.



329 O.

ETRURIA

326 c. 400 BC(?).

Obv. Lion-headed monster (x4)

327 POPULONIA, c. 225–200 BC.

Obv. Gorgoneion. *Rev.* Two caducei (x2)328 THEZI, c. 375 BC(?). *Rev.* Wheel (x2)329 THEZI, c. 375 BC(?). *Obv.* Gorgon (x4)

330 THEZI, c. 350–330 BC.

Obv. Cow's head. *Rev.* Hippocamp (x2)

330



331



332



333

334

MASSALIA 331 c. 350 BC. *Obv.* Artemis. *Rev.* Lion (x4)
BARCIDS (in Spain) - 332 c. 230-220 BC. *Obv.* Melcarth. *Rev.* Elephant and rider (x4) - 333 c. 230-220 BC - 334 c. 210-200. BC. *Obv.* Melcarth. *Rev.* Elephant. (x2)

GREECE
THE AEGEAN ISLANDS
CRETE



335 O.

336 O.



335 R.

336 R.

337 R.

338 R.



337 O.

338 O.

335 c. 560–520 BC – 336 c. 480–457 BC. *Obv.* Turtle (x4). *Rev.* Incuse square (x2) – 337 c. 350 BC – 338 c. 350–320 BC. *Obv.* Turtle (x4). *Rev.* Incuse square (x2)

AEGINA



339 O.



340 O.



340 R.



341 O.



342 O.



343 O.



344 O.



345 O.



346 O.



346 R.



347 O.



348 O.

ATHENS

- 339 c. 570–550 BC. *Obv.* Amphora (x4)
- 340 c. 570–550 BC. *Obv.* Triskeles. *Rev.* Incuse square (x2)
- 341 c. 550 BC. *Obv.* Astragalos (x2)
- 342 c. 550 BC. *Obv.* Cartwheel (x2)
- 343 c. 540–520 BC. *Obv.* Wheel (x2)
- 344 c. 550–540 BC. *Obv.* Horse (x2)
- 345 c. 550–540 BC. *Obv.* Forepart of horse (x4)
- 346 c. 570–550 BC. *Obv.* Owl. *Rev.* Incuse square (x2)
- 347 c. 540–520 BC. *Obv.* Bull's head (x2)

CHALCIS

- 348 c. 550 BC. *Obv.* Quadriga (x4)



349 O.



349 R.



350 R.



350 O.

ATHENS

349 c. 530–520 BC.

Obv. Gorgoneion (x4). *Rev.* Lion's head (x2)

350 c. 530–520 BC.

Obv. Gorgoneion (x4). *Rev.* Bull's head (x2)

ATHENS

351 520-510 BC.

Obv. Athena (x4).

Rev. Owl (x2)

352, 353 c. 520-510 BC.

Obv. Athena (x4).

Rev. (Plate 117) Owl (x2)

354 c. 510-500 BC.

Obv. Athena.

Rev. Artemis (?) (x4)



351 O.



351 R.



352 O.



353 O.



354



352 R.



353 R.



355 O.



355 R.



356 R.



356 O.

ATHENS

355 c. 520–510 BC. – 356 c. 510–500 BC. *Obv.* Athena (x4). *Rev.* Owl (x2)



357 R.

ATHENS

357 c. 479 BC. *Obv.* See Plate XII. *Rev.* Owl (x4) – 358 c. 479 BC. *Obv.* Athena. *Rev.* Owl (x2)



358



PLATE XII ATHENS
357 c. 479 BC. *Obv.* Athena (x5). *Rev.* See Plate 118



359

360

361

362



363

ATHENS

359 c. 460 BC - 360, 361 c. 480-460 BC - 362 c. 450-440 BC - 363 c. 440-430 BC. *Obv.* Athena. *Rev.* Owl (x2, except no. 363, x4)



364 O.



364 R.



365



ATHENS

364 c. 191-190 BC. - 365 c. 167-166 BC - 366 c. 86-84 BC. *Obv.* Athena. *Rev.* Owl on amphora (x2, except no. 364 O., x5)



EUBOEA

367 CHALCIS, c. 520-506 BC. *Obv.* Eagle. *Rev.* Wheel (x4) - 368 ERETRIA, c. 525-515 BC. *Obv.* Cow (x2) - 369 ERETRIA, c. 525-515 BC. *Obv.* Cow (x4). *Rev.* Octopus (x2)





370



371

EUBOEA

372 EUBOEAN LEAGUE, c. 340–338 BC. *Obv.* Euboea. *Rev.* Cow's head (x3)

373 ERETRIA, c. 196–146 BC. *Obv.* Artemis *Rev.* Cow (x2)



373

EUBOEA

370 EUBOEAN LEAGUE, c. 411/10 BC.

Obv. Cow. *Rev.* Euboea (x4)

371 EUBOEAN LEAGUE, c. 395 BC.

Obv. Euboea. *Rev.* Cow (x2)



372



374 O.

375 O.



376 O.

MACEDONIA

374 UNCERTAIN, c. 525-500 BC. *Obv.* Two nymphs holding amphora (x4) - 375 ORRESCII, c. 520-500 BC. *Obv.* Centaur carrying nymph (x4) - 376 ORRESCII, c. 520-500 BC. *Obv.* Warrior with two oxen (x4) - 377 ZAIELIOI, c. 520-500 BC. *Obv.* Centaur carrying nymph (x2) - 378 LETE, c. 520-500 BC. *Obv.* Satyr and nymph (x2) - 379 LETE, c. 500-480 BC. *Obv.* Satyr restraining nymph (x2)

377 O.

378 O.

379 O.



380 O.



381 O.

MACEDONIA

380, 381 AEGAE, c. 500–480 BC. *Obv.* Goat (x4)

382 ICHNAE, c. 500–480 BC. *Obv.* Warrior with horse. *Rev.* Wheel (x2)

383 ICHNAE (?), c. 520–500 BC. *Obv.* Herdsman with two oxen (x4). *Rev.* Wheel (1:1)



383 R.



382



383 O.



384 O.

385

MACEDONIA

384 BISALTAE, c. 500–480 BC.
Obv. Warrior and horse (x4)

385 BISALTAE, c. 500–480 BC.
Obv. Warrior and horse.
Rev. Incuse square (x2)

386 EDONI, KING GETAS, c. 500–480 BC.
Obv. Herdsman with two oxen (x4).
Rev. Incuse square with legend (x2)



386 R.

386 O.

MACEDONIA

- 387 DERRONES, c. 520-500 BC.
Obv. Hermes with oxen-drawn
 (x4)
 388 DERRONES, c. 520-500 BC.
Obv. Oxen drawing king (?)
 wheeled seat (x2).
Rev. Triskeles and palmettes (1)
 389 THERMA (?), c. 520-500 BC.
Obv. Pegasus (x4)



387 O.



388 R.



388 O.



389 O.

CARIA

390 CALYMNA (See note p. 329), c. 520 BC.

Obv. Helmeted head (x4). *Rev.* Lyre (x2)

MACEDONIA AND THRACE

391 DICAIA (in Thrace), c. 520 BC.

Obv. Heracles (x4)

392 DICAIA (in Macedonia), c. 520–510 BC.

Obv. Cow. *Rev.* Octopus (x2)



390 O.



390 R.



391 O.



392



393



394 O.



395 O.



396

CHALCIDICE

- 393 SCIONE, c. 510–500 BC.
Obv. Protesilaus. *Rev.* Stern of ship (x2)
 394 SERMYLE, c. 500–480 BC.
Obv. Horseman with hound (x4)
 395 POTIDAEA, c. 530–520 BC.
Obv. Poseidon mounted (x4)
 396 OLYNTHUS (?), c. 520 BC.
Obv. Quadriga. *Rev.* Eagle (x2)



397 O.



398 O.



399 O.



400 O.

CHALCIDICE

- 397 ACANTHUS, c. 530–500 BC. *Obv.* Lion attacking bull (x2) – 398 ACANTHUS, c. 530–500 BC. *Obv.* Lioness attacking bull (x4) – 399 ACANTHUS, c. 450 BC. *Obv.* Forepart of bull (x4) – 400 ACANTHUS, c. 424–400 BC. *Obv.* Lion attacking bull (x4). *Rev.* Incuse square with legend (x2)

400 R.



401 O.



402 O.

CHALCIDICE

- 401 TERONE, c. 500 BC. *Obv.* Amphora (x4)
 402 MENDE, c. 500-480 BC. *Obv.* Ass (x4)
 403 MENDE, c. 425 BC. *Obv.* Dionysus on ass (x4). *Rev.* Vine and legend (x2)



403 O.



R.



PLATE XIII MENDE

405 c. 425 BC. *Obv.* Dionysus on ass (x5). *Rev.* See Plate 131

CHALCIDICE

- 404 MENDE, c. 425 BC. *Obv.* Dionysus on ass (x4). *Rev.* Sun and legend (x2)
 405 MENDE, c. 425 BC. *Obv.* See Plate XIII. *Rev.* Incuse square and legend (x2)



404 O.



- 404 R.
 405 R.
 406 R.

CHALCIDICE

- 406 MENDE, c. 425 BC. *Obv.* Dionysus on ass (x4). *Rev.* Vine and legend (x2)

406 O.



407 O.

CHALCIDIAN LEAGUE

407 c. 412-410 BC - 408 c. 392-383 BC - 409 c. 395-392 BC.

Obv. Apollo (x4, except no. 408, x2). Rev. Lyre (x2)



409 O.



407 R.



408



409 R.



414 R.



411 R.



412 R.



415 R.



414 O.

411, 412 Rev. See Plate 133
AMPHIPOLIS

414 c. 400 BC - 415 c. 390-357 BC. Obv. Apollo (x4). Rev. Torch (x2)



415 O.



416 R.



416 O.

AMPHIPOLIS

416, 417, 418 c. 390–357 BC. *Obv.* Apollo (x4, except no. 417, x2). *Rev.* Torch (x2)



417



418 R.



418 O.



419 O.



419 R.



420 O.



421

AENUS

419 c. 455/4-453/2 BC.

Obv. Hermes (x4). Rev. Goat (x2)

420 c. 455/4-453/2 BC.

Obv. Hermes (x4)

421 c. 453/2-451/0 BC.

Obv. Hermes. Rev. Goat (x2)



AENUS

422 c. 412/1–410/9 BC. *Obv.* Hermes. *Rev.* Goat (x4)

423 c. 408/7–407/6 BC – 424 c. 400/399–398/7 BC

425 c. 357–342/1 BC. *Obv.* Hermes (x4)



423 O.

425 O.

424 O.



426 O.



428



427 R.



427 O.

ABDERA

426 c. 520/15–492 BC.

Obv. Griffin (x4)

427 c. 473/0–449/8 BC.

Obv. Griffin (x4). Rev. Incuse square and legend (x2)

428 c. 375/3–365/60 BC.

Obv. Griffin. Rev. Apollo (x2)



430 O.



430 R.



431 O.



431 R.

MARONEA

429, 430 c. 430 BC. *Obv.* Horse. *Rev.* Vine and legend (x4 and x2)431 c. 400 BC. *Obv.* Dionysus (x4). *Rev.* Vine and legend (x2)



432



433 O.



435 O.



434





PLATE XIV THASOS

436 c. 465–450 BC. *Obv.* Satyr carrying nymph (x5)

◁ THRACIAN CHERSONESE

432 c. 500 BC. *Obv.* Lion. *Rev.* Athena (x3)

NEAPOLIS DATENON

433 c. 500–480 BC. *Obv.* Gorgoneion (x4)

434 c. 400–350 BC. *Obv.* Gorgoneion. *Rev.* Artemis (x4)

THASOS

435 c. 520 BC. *Obv.* Satyr carrying nymph (x4)



437 O.



THASOS

- 437 c. 420–410 BC. *Obv.* Satyr carrying nymph (x4)
 438 c. 375–350 BC. *Obv.* Satyr. *Rev.* Crater (x4)
 439 c. 370–350 BC. *Obv.* Dionysus. *Rev.* Heracles (x4)



440



441



443 R.



443 O.



444 R.



444 O.



PLATE XV PANTICAPAEUM
442 c. 350 BC, gold. *Obv.* Pan (x5)

◁ PANTICAPAEUM

440 c. 320–300 BC, gold. – 441 c. 350–335 BC, gold. *Obv.* Pan. *Rev.* Griffin (x4)

BYZANTIUM

443 c. 230–220 BC. *Obv.* Demeter (x2). *Rev.* Poseidon (1:1)

CALCHEDON

444 c. 230–220 BC. *Obv.* Demeter (x2). *Rev.* Apollo (1:1)



PLATE XVI PEPARETHOS

446 c. 500–480 BC. *Obv.* See Plate 143. *Rev.* Running male figure (x5)



445 R.



445 O.



446 O.



48



447 R.

PEPARETHOS

45 c. 520–510 BC. *Obv.* Grapes (x4). *Rev.* Dolphin-rider (x2)

46 c. 500–480 BC. *Obv.* Grapes (x2). *Rev.* See Plate XVI

47 c. 500–480 BC. *Rev.* Heracles (x4)

CORCYRA

48 c. 400–375 BC. *Obv.* Cow and calf. *Rev.* Double floral pattern (x2)



451 R.

449

450 R.

452



453



454 R.



455 R.



456 R.



457 R.



458



459 R.

BOEOTIA

449 ACRAEPHIA, c. 450 BC. *Obv.* Shield. *Rev.* Cantharus (x2) – 450 THEBES, c. 446–426 BC. *Rev.* Heracles (x2) – 451 THEBES, c. 446–426 BC. *Rev.* Seated figure (x4) – 452 THEBES, c. 446–426 BC. *Rev.* Heracles stringing bow (x4) – 453 THEBES, c. 446–426 BC. *Obv.* Shield. *Rev.* Heracles stringing bow (x4) – 454 THEBES, c. 446–426 BC. *Rev.* Heracles strangling snakes (x2) – 455 THEBES, c. 410–400 BC. *Rev.* Heracles (x2) – 456, 457 THEBES, c. 410–400 BC. *Rev.* Dionysus (x4) – 458 THEBES, c. 410–400 BC. *Obv.* Shield. *Rev.* Dionysus (x2) – 459 THEBES, c. 350–338 BC. *Rev.* Crater (x2)



460

BOEOTIA

460 HALIARTUS, c. 387-374 BC. *Obv.* Shield. *Rev.* Poseidon (x4)

PHOCIS

461 DELPHI, c. 479-470 BC. *Obv.* Two rams' heads. *Rev.* Four sunk squares enclosing dolphins (x4)



461



463 O.

PHOCIS

462 DELPHI, 336 BC. *Obv.* Demeter. *Rev.* Apollo on omphalos (x4)

463 DELPHI, 336 BC. *Obv.* Demeter (x4)

464 PHOCIS, c. 480 BC. *Obv.* Bull's head. *Rev.* Female head (x4)



465



466



467



468



469



470 O.



471



470 R.

LOCRI

465 c. 350 BC. *Obv.* Persephone. *Rev.* Ajax (x4)

THESSALY

466 LARISSA, c. 430–400 BC. *Obv.* Bull-fighter. *Rev.* Horse (x2)

467 LARISSA, c. 400 BC – 468 LARISSA, c. 350 BC.

Obv. Nymph Larissa. *Rev.* Horse (x2 and x4)469 LAMIA, c. 375 BC. *Obv.* Dionysus. *Rev.* Crater (x4)470 GOMPHI, c. 350–340 BC. *Obv.* Hera? (x4). *Rev.* Zeus (x2)471 PHERAE, ALEXANDER, 369–358 BC. *Obv.* Artemis-Hecate. *Rev.* Armed horseman (x2)

EPIRUS

472 PYRRHUS, 297-272 BC.

Obv. Zeus (x4). *Rev.* Dione (x2)

473 PYRRHUS.

Obv. Achilles. *Rev.* Thetis on hippocamp (x4)



472 O.



472 R.



473



475



EPIRUS

474 PYRRHUS, 297-272 BC, gold.
Obv. Athena.

Rev. Nike carrying trophy (x4)

475 PYRRHUS, 297-272 BC.

Obv. Persephone.

Rev. Athena (x3)

476 PYRRHUS, 297-272 BC, gold.

Obv. Artemis (x4)

477 FEDERAL, c. 230-220 BC.

Obv. Zeus and Dione (x4).

Rev. Bull (x2)



477 R.



477 O.



478 O.



480



481 R.



478 R.



479 R.



479 O.



482 R.

CORINTH

478 c. 550 BC. *Obv.* Pegasus (x4). *Rev.* Incuse square (x2)

479 c. 540–520 BC. *Obv.* Pegasus (x4). *Rev.* Incuse of swastika shape (x2)

480 c. 515–500 BC. *Obv.* Pegasus. *Rev.* Athena (x2)

481 c. 515–500 BC – 482 c. 470–450 BC. *Rev.* Athena (x4)



484 R.



483 R.



486



488 R.

CORINTH

483 c. 450–440 BC – 484 c. 440–430 BC. *Rev.* Athena (x4) – 485 c. 420–400 BC. *Obv.* Pegasus. *Rev.* Athena (x2) – 486 c. 350 BC. *Obv.* Bellerophon on Pegasus. *Rev.* Chimaera (x2.5) – 487 c. 325–308 BC. *Obv.* Pegasus. *Rev.* Athena (x2.5) – 488 c. 340–325 BC. *Rev.* Athena (x2.5)



489 R.

491

490 O.



492 O.

493 O.



494 O.



494 R.



495



496 O.



496 R.

ELIS

- 489 c. 510–500 BC. *Obv.* Eagle (x4). *Rev.* Thunderbolt (x2) – 490 c. 500–490 BC
 491 c. 470 BC. *Obv.* Eagle (x2). *Rev.* Nike (x4 and x2) – 492 c. 480–470 BC
 493 c. 460–450 BC. *Obv.* Eagle (x4)
 494 c. 450–430 BC – 496 c. 440–430 BC. *Obv.* Eagle (x2). *Rev.* Nike (x4)
 495 c. 450 BC. *Obv.* Eagle. *Rev.* Zeus (x2)





497 O.



498 R.



499

ELIS

497 c. 430–420 BC. *Obv.* Eagle (x4) – 498 c. 430–420 BC. *Rev.* Nike (x4) – 499 c. 420–410 BC. *Obv.* Zeus. *Rev.* Thunderbolt (x4)



PLATE XVII ELIS
503 c. 360 BC. *Obv.* Zeus (x5)



500 O.

4 O.



500 R.



501 R.

4 R.

LIS

0 c. 400 BC. *Obv.* Eagle's head (x4). *Rev.* Thunderbolt (x2) – 501 c. 375 BC. *Obv.* Thunderbolt (x2) – 502 c. 375 BC. *Obv.* Shield with eagle standing on ram (x4) – 504 c. 350 BC. *Obv.* Zeus. *Rev.* Eagle (x4)



502 O.



505



506 O.



507 R.

ELIS

505 c. 350 BC -- 506 c. 325 BC. *Obv.* Zeus (x2 and x4). *Rev.* Eagle (x2) -- 507 c. 420-410 BC. *Obv.* Hera (x4). *Rev.* Thunderbolt (x2) -- 508 c. 350 BC. *Obv.* Hera. *Rev.* Eagle (x2)



506 R.



507 O.



508



509

510

511



512



513 O.

PELOPONNESE

509 ZACYNTHUS, c. 370 BC. *Obv.* Apollo. *Rev.* Iamus fed by serpents (x2) – 510 SICYON, c. 420 BC. *Obv.* Chimaera. *Rev.* Dove (x2) – 511 MESSENE, c. 360 BC. *Obv.* Demeter. *Rev.* Zeus (x2) – 512 ARCADIAN LEAGUE, c. 370–360 BC. *Obv.* Zeus. *Rev.* Pan (x2) – 513 ARCADIAN LEAGUE, c. 370–360 BC. *Obv.* Zeus (x4)



514

515

PELOPONNESE

514 STYMPHALUS, c. 350 BC. *Obv.* Artemis. *Rev.* Heracles (x4) – 515 PHENEUS, c. 360 BC. *Obv.* Demeter. *Rev.* Hermes carrying Arcas (x4)
 516 ACHAEAN LEAGUE, c. 370–360 BC. *Obv.* Artemis (?). *Rev.* Zeus (x2) – 517 ARGOS, c. 370–350 BC. *Obv.* Hera. *Rev.* Dolphins (x2) – 518 ARGOS,
 c. 370–350 BC. *Obv.* Hera. *Rev.* Diomedes (x2) – 519 EPIDAUROS, c. 350–330 BC. *Obv.* Apollo. *Rev.* Asclepius (x2) – 520 LACEDAEMON, AREUS, 309/8–265
Obv. Areus. *Rev.* Cult statue (x2) – 521 LACEDAEMON, c. 260–210 BC. *Obv.* Apollo. *Rev.* Heracles (x2) – 522 LACEDAEMON, NABIS, c. 207–192 BC. *Obv.* Nab
Rev. Heracles (x2)



517



518



519



16



521



522



20



523 O.



525 O.



524 O.



526 O.



527 O.



528 O.



529 O.



530 O.

AEGEAN ISLANDS

523, 524 NAXOS, c. 500-490 BC. *Obv.* Cantharus (x3) - 525 TENOS, c. 550-500 BC. *Obv.* Grapes (x3) - 526 DELOS, c. 550-500 BC. *Obv.* Lyre (x4)
527 SIPHROS, c. 550 BC. *Obv.* Eagle (x4) - 528 THERA (?), c. 550-525 BC. *Obv.* Dolphins (x3) - 529 SERIPHOS, c. 550-525 BC. *Obv.* Frog (x3)
530 PAROS, c. 550 BC. *Obv.* Goat (x3)



1 O.



532 O.



2 R.



533 R.



534



AEGEAN ISLANDS

- 531 MELOS, c. 420–416 BC. *Rev.* Ram's head (x4)
- 532 MELOS, c. 420–416 BC. *Obv.* Apple (x4). *Rev.* Male head (x2)
- 533 MELOS, c. 420–416 BC. *Rev.* Gorgoneion (x2)
- 534 SIPHNIOS, c. 480 BC. *Obv.* Apollo. *Rev.* Eagle (x2)
- 535 IOS, c. 325–300 BC. *Obv.* Homer (x4)
- 536 PAROS, c. 250 BC. *Obv.* Female head. *Rev.* Goat (x2)



O.



536





537



538



539 O.



539 R.



540 O.

CRETE

- 537 GORTYNA, c. 450 BC. *Obv.* Europa on bull. *Rev.* Lion's head (x2) — 538 GORTYNA, c. 430–420 BC. *Obv.* Europa on bull. *Rev.* Hermes (x2)
 539 GORTYNA, c. 325 BC. *Obv.* Europa in tree (x4). *Rev.* Bull (x2) — 540 GORTYNA, c. 300 BC. *Obv.* Europa in tree (x2) — 541 CNOSSUS, c. 450 BC.
 542 CNOSSUS, c. 400 BC. *Obv.* Minotaur. *Rev.* Labyrinth (x2) — 543 CNOSSUS, c. 350 BC. *Obv.* Ariadne (?) in labyrinth. *Rev.* Minos (x4) — 544 CNOSSUS, c. 350–325 BC. *Obv.* Hera. *Rev.* Labyrinth (x4)



542



543



544



545 O.

CRETE

- 545 ITANUS, c. 450 BC. *Obv.* Sea-god (x4). *Rev.* Star (x2)
 546 ITANUS, c. 375–350 BC. *Obv.* Sea-god (x4). *Rev.* Two sea-monsters (x2)
 547 PRAESUS, c. 375–350 BC. *Obv.* Zeus. *Rev.* Forepart of goat (x2)



545 R.



547



546 O.



546 R.



549 O.

550



552 O

CRETE

548 LYTTUS, c. 400 BC. *Obv.* Eagle. *Rev.* Forepart of boar (x2) – 549 PHAESTUS, c. 325–300 BC. *Obv.* Zeus Velchanos (x4) – 550 PHAESTUS, c. 350 BC. *Obv.* Heracles. *Rev.* Bull (x2) – 551 PHAESTUS, c. 350–325 BC. *Obv.* Talos. *Rev.* Bull (x2) – 552 PHAESTUS, c. 325 BC. *Obv.* Heracles attacking Hydra (x4)



553 R.



554 O.



553 O.

CRETE

- 553 SYBRITA, c. 330 BC. *Obv.* Dionysus on lioness (x2). *Rev* Hermes (x4)
 554 SYBRITA, c. 350 BC. *Obv.* Dionysus (x2)
 555 SYBRITA, c. 360 BC. *Obv.* Dionysus. *Rev.* Hermes (x4)



557 O.



556 R.

O.



558

559

560

561

MACEDONIA: KINGS

556 ALEXANDER I, c. 495-454/1 bc. *Obv.* Mounted huntsman (x4). *Rev.* Incuse square and king's name (x2) - 557 ALEXANDER I, *Obv.* Huntsman and horse (x2) - 558 ARCHELAUS I, 413-399 bc. *Obv.* Mounted huntsman. *Rev.* Forepart of goat (x2) - 559 ARCHELAUS I, *Obv.* Male head. *Rev.* Horse (x2) - 560 AMYNTAS III, 393-370 bc. *Obv.* Heracles. *Rev.* Horse (x2) - 561 PERDICCAS III, 365-359 bc. *Obv.* Heracles. *Rev.* Horse (x2)



562



563

MACEDONIA: KINGS

562 PHILIP II, 359-336 BC. *Obv.* Zeus. *Rev.* Horseman (x4) - 563 PHILIP II. *Obv.* Zeus. *Rev.* Victorious jockey (x4)



PLATE XVIII MACEDONIA

565 PHILIP II, 359–336 BC, gold (probably a posthumous issue). *Obv.* Apollo (x5). *Rev.* See Plate 171

564 O.



567 O.

MACEDONIA: KINGS

564 PHILIP II, 359-336 BC, gold. *Obv.* Apollo (x4)

565 PHILIP II, gold. *Obv.* See Plate XVIII. *Rev.* Biga (x4)

566 PHILIP II, gold. *Obv.* Apollo (x4)

567, 568 PHILIP II. *Obv.* Zeus (x4)



568 O.

565 R.

566 O.



569

571 O.

MACEDONIA. KINGS

- 569 ALEXANDER THE GREAT, 336–323 BC. *Obv.* Heracles. *Rev.* Zeus (x4)
 570 ALEXANDER THE GREAT, posthumous issue from Sardis, 228–223 BC. *Obv.* Heracles. *Rev.* Zeus (x2)
 571 ALEXANDER THE GREAT, posthumous issue from Sicyon, c. 280 BC (?). *Obv.* Heracles (x2)

MACEDONIA: KINGS

572 ALEXANDER THE GREAT, 336-323 BC. *Obv.* Heracles (x2). *Rev.* Zeus (x4)





573



575 O.



576 O.



575 R.



MACEDONIA: KINGS

573 DEMETRIUS POLIORCETES, 306–283 BC. *Obv.* Demetrius. *Rev.* Poseidon (x2)

574 DEMETRIUS POLIORCETES, *Obv.* Nike on prow. *Rev.* Poseidon (x2)

575 ANTIGONUS III DOSON, 229–221 BC. *Obv.* Poseidon (x4). *Rev.* Apollo seated on prow (x2)

576 ANTIGONUS III DOSON, *Obv.* Poseidon (x2)

MACEDONIA: KINGS

- 577 PHILIP V, 221-179 BC. *Obv.* (x4)
 578 PERSEUS, 179-168 BC. *Obv.* Perseus (x4).
Rev. Eagle (x2)
 579 T. QVINCTIVS FLAMINIVS, 228-174
 BC, gold. *Obv.* Flamininus. *Rev.* Nike (x3)

578 R.



578 O.

THRACE: KINGS

- 580 LYSIMACHUS, 306–281 BC. *Obv.* Alexander the Great (x4). *Rev.* Athena (x2)
 581 LYSIMACHUS. *Obv.* Alexander the Great (x4)
 582 LYSIMACHUS, posthumous issue from Byzantium, gold. *Obv.* Alexander the Great. *Rev.* Athena (x2.5)



580 O.



580 R.

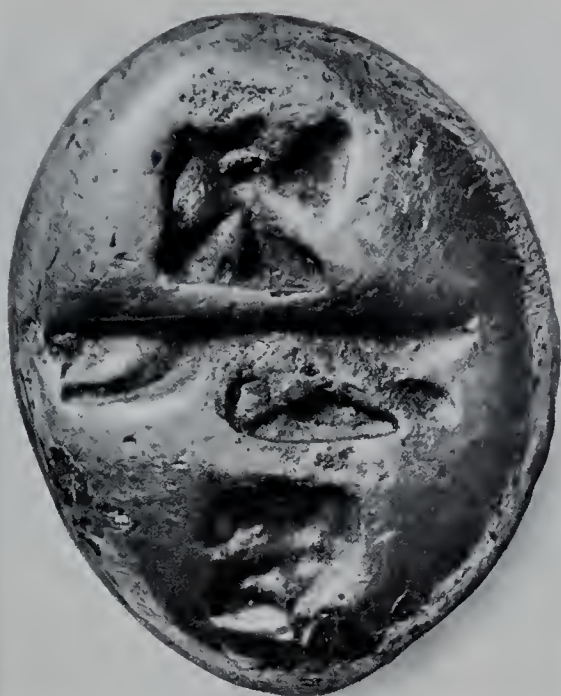


582



581 O.

ASIA



NIA AND LYDIA

- UNCERTAIN, c. 600 BC, electrum. *Obv.* Striated surface. *Rev.* Three punch-marks (x4)
 LYDIA, CROESUS, 561-546 BC, gold. *Obv.* Foreparts of bull and lion. *Rev.* Two punch-marks (x4)
 EPHESUS, PHANES, c. 600 BC, electrum. *Obv.* Stag. *Rev.* Two punch-marks (x4)
 UNCERTAIN, c. 550 BC, electrum. *Obv.* Two lions rampant (x4)
 UNCERTAIN, c. 550 BC, electrum. *Obv.* Forepart of goat (x4)
 MILETUS, c. 575 BC, electrum. *Obv.* Two lions' heads back to back

586 O.

587 O.

588 O.



589 O.
591 O.
591 R.

590 O.
592 O.
593 O.



594 O.



595 O.



596 O.



597 O.



598 O.



599 R.



599 O.



600



601



IONIA

589 MILETUS(?), c. 575 BC, electrum. *Obv.* Cow and calf (x4) – 590 LYDIA, CROESUS, 561–546 BC, electrum. *Obv.* Foreparts of lion and bull (x4) – 591 MILETUS, c. 575 BC, electrum. *Obv.* Lion. *Rev.* Punches with deer, fox and star (x4) – 592 SMYRNA(?), c. 575 BC, electrum. *Obv.* Lion (x4) – 593 PHOCAEA, c. 550 BC, electrum. *Obv.* Seal (x4) – 594 c. 500 BC, electrum. *Obv.* Griffin (x4) – 595 c. 520 BC, electrum – 596 c. 480 BC, electrum. *Obv.* Female head (x4) – 597 c. 500 BC, electrum. *Obv.* Man-faced bull (x4) – EPHESUS. 598 c. 520–500 BC – 599 c. 420–400 BC. *Obv.* Bee (x4). *Rev.* Incuse square (x2) – 600 c. 375–300 BC. *Obv.* Bee. *Rev.* Forepart of stag (x2) – 601 c. 258–202 BC. *Obv.* Artemis. *Rev.* Forepart of stag (x3)

IONIA

- 602 COLOPHON, c. 480-470 BC.
Obv. Apollo. *Rev.* Lyre (x4)
 603 ERYTHRAE, c. 500 BC.
Obv. Horseman (x4)
 604 UNCERTAIN, c. 450 BC, electrum.
Obv. Heracles (x4)



602



603 O.

604 O.



605



606 O.

607 O.

IONIA

- 605 CHIOS, c. 400-350 BC.
Obv. Sphinx. *Rev.* Incuse square with moneyer's name (x2.5)
 606 CHIOS, c. 500-480 BC.
Obv. Sphinx (x4)
 607 CLAZOMENAE, c. 500 BC.
Obv. Forepart of winged boar (x4)

IONIA

608 CLAZOMENAE, c. 375 BC.

Obv. Apollo (x 4). *Rev.* Swan (x2)

609 COLOPHON, c. 175 BC.

Obv. Apollo (x2). *Rev.* Apollo (1:1)

610 MAGNESIA, c. 150 BC.

Obv. Artemis (x3). *Rev.* Apollo (1:1)



608 O.

608 R.



609 O.

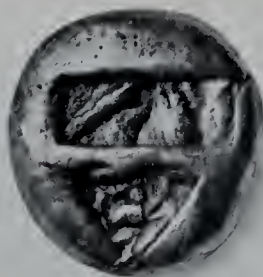
609 R.

610 R.

610 O.



611 O.



612 R.



612 O.



613



614



615

616



IONIA: SAMOS, c. 600 BC, electrum. *Obv.* Lion's scalp (x4). *Rev.* Two punch-marks (x2) – 612 SAMOS(?), c. 500 BC, electrum. *Obv.* Forepart of ox (x4). *Rev.* Incuse punch-mark (x2) – 613 SAMIANS AT ZANCLE, 494–489 BC. *Obv.* Lion's scalp on shield. *Rev.* Prow of warship (x4) – 614 SAMOS, c. 470 BC. *Obv.* Lion's scalp. *Rev.* Ox head (x2) – 615 SAMOS, 454/3 BC. *Obv.* Lion's scalp. *Rev.* Forepart of ox (x2) – 616 SAMOS: ALLIANCE ISSUE, 394/3 BC. *Obv.* Snakes and snakes. *Rev.* Lion's scalp (x2) – 617 397/6 BC. *Obv.* Lion's scalp. *Rev.* Forepart of ox (x4) – 618 PERSIA, c. 485–450 BC(?), gold – 619 PERSIA, c. 450–350 BC – 620 PERSIA, c. 330–300 BC, gold. *Obv.* Persian king (x2). *Rev.* Incuse punch-mark (1 : 1, except no. 620, x2)

618 R.

619 R.

618 O.

619 O.

620





621 O.



621 R.



622 R.



623 R.



622 O.



623 O.

PERSIAN SATRAPS

- 621 TISSAPHERNES, c. 412/1 BC. *Obv.* Tissaphernes (x4). *Rev.* Owl (x2)
 622 TISSAPHERNES, c. 400–395 BC. *Obv.* Tissaphernes (x4). *Rev.* Lyre (x2)
 623 PHARNABAZUS, c. 395/4 BC. *Obv.* Pharnabazus (x4). *Rev.* Persian and warship (x2)



624 O.



625 O.

RIA

UNCERTAIN, c. 520 BC. *Obv.* Triskeles of winged lions (x4)
 MYLASA(?), c. 500 BC. *Obv.* Forepart of lion (x4)
 CNIDUS, c. 520 BC. *Obv.* Lion (x2). *Rev.* Aphrodite (x4)
 CNIDUS, c. 530 BC. *Obv.* Lion (x2). *Rev.* Aphrodite (x4)
 CNIDUS, c. 510 BC. *Obv.* Forepart of lion (x2). *Rev.* Aphrodite (x4)



626 O.



627 O.



628 O.



626 R.



627 R.



628 R.



629 R.



630 R.



631 R.



629 O.



630 O.



631 O.



632 O.



632 R.



634



633

CARIA: CNIDUS

629, 630 c. 455 BC – 631 c. 480 BC – 632 c. 395 BC.

Obv. Lion (x2). Rev. Aphrodite (x4)

633 c. 350 BC – 634 c. 300–250 BC.

Obv. Aphrodite. Rev. Lion (x3 and x2)



635

636



637

635 TERMERA. TYMNES, c. 490–480 BC. *Obv.* Heracles. *Rev.* Lion (x2)

636, 637 UNCERTAIN CARIAN, c. 450–430 BC. *Obv.* Nike. *Rev.* Pyramid (x2 and x4)

638 MAUSSOLLUS, 377–353 BC. *Obv.* Apollo. *Rev.* Zeus (x3.5)



638



639 640



641 642 643



644



645 O.



646



647 R.



647 O.



648

COS 639 c. 450 BC. *Obv.* Discobolus. *Rev.* Crab (x2) – 640 c. 350 BC. *Obv.* Heracles. *Rev.* Crab (x2).

RHODES 641 LINDUS, c. 500 BC. *Obv.* Lion. *Rev.* Dolphin (x2) – 642 IALYSUS, c. 500 BC. *Obv.* Forepart of winged boar. *Rev.* Eagle (x2)

643 CAMIRUS, c. 520 BC. *Obv.* Fig-leaf. *Rev.* Incuse square (x2) – 644 c. 375 BC, gold. *Obv.* Helios. *Rev.* Rose (x4) – 645 c. 375–350 BC. *Obv.*

Helios (x4) – 646 c. 408–400 BC – 647 c. 300–250 BC – 648 c. 88–43 BC. *Obv.* Helios (x2, x4 and x1.5). *Rev.* Rose (x2, x2 and x1.5)



649



650



651 O.



652



651 R.



655



653



654



LYCIA

- 649 KUPRLI, c. 460 BC. *Obv.* Forepart of griffin. *Rev.* Triskeles (x2)
- 650 c. 470 BC. *Obv.* Boar. *Rev.* Triskeles of cocks' heads (x2)
- 651 TETHIVEIBI, c. 460 BC. *Obv.* Female head (x4). *Rev.* Tetraskes (x2)
- 652 KHARAI, c. 430 BC. *Obv.* Female head. *Rev.* Owl (x2)
- 653 KHARAI, c. 430 BC. *Obv.* Athena. *Rev.* Kharai (x3)
- 654 Mint of TELMESSUS, c. 400 BC. *Obv.* Athena. *Rev.* Heracles (x2)
- 655 VEKHSERE, c. 400-380 BC. *Obv.* Forepart of lion. *Rev.* Athena (x2)



658 R.



659 R.



660 R.



660 O.

LYCIA

656 MITHRAPATA, c. 380–360 BC. *Obv.* Forepart of lion. *Rev.* Mithrapata (x2) – 657 MITHRAPATA. *Obv.* Lion's scalp. *Rev.* Mithrapata (x2) – 658 MITHRAPATA. *Rev.* (x4) – 659 PERICLES OF ANTIPHELLUS, c. 380–360 BC. *Rev.* Warrior (x2) – 660 PERICLES. *Obv.* Pericles (x4). *Rev.* Warrior (x2)



661



662



663

664

665

PAMPHYLIA

661 SIDE, c. 460 BC. *Obv.* Pomegranate. *Rev.* Athena (x2) – 662 SIDE, c. 205–188 BC. *Obv.* Athena. *Rev.* Nike (x2) – 663 ASPENDUS, c. 400 BC – c. 375 BC – 665 c. 275–250 BC. *Obv.* Wrestlers. *Rev.* Slinger (x3)



667



670

CILICIA

MALLUS, c. 375 BC. *Obv.* Aphrodite. *Rev.* Satrap (x2) – 667 MALLUS, c. 375 BC. *Obv.* Cronus. *Rev.* Demeter (x2) – 668 NAGIDUS, c. 360 BC – 669 NAGIDUS, c. 350 BC. *Obv.* Aphrodite. *Rev.* Dionysus (x4 and x2) – 670 APHRODISIAS, c. 375 BC. *Obv.* Athena. *Rev.* Aphrodite (x2)

671



673



CILICIA: CELENDERIS 671, 672 c. 410–400 BC. *Obv.* Horseman. *Rev.* Goat (x2) – TARSUS 673 c. 400–380 BC. *Obv.* Satrap ploughing. *Rev.* Ox and calf (x2) – 674 c. 400–380 BC. *Obv.* Athena. *Rev.* Kneeling girl (x2) – SOLI 675 c. 350 BC. *Obv.* Athena. *Rev.* Grapes (x2) – 676 MAZAEUS, 360–333 BC. *Obv.* Baal. *Rev.* Lion attacking stag (x2)
 CYPRUS: SALAMIS 677 c. 480–460 BC. *Obv.* Ram. *Rev.* *Crux ansata* (x2) – 678 EVAGORASI, 411–373 BC. *Obv.* Heracles. *Rev.* Goat (x2) – 679 EVAGORAS II, 361–351 BC, gold. *Obv.* Eagle and lion (x2). *Rev.* City goddess (x4) – SOLI 680 c. 325–300 BC, gold. *Obv.* Apollo. *Rev.* Aphrodite (x4)
 PHOENICIA: TYRE 681 c. 460 BC. *Obv.* Dolphin. *Rev.* Owl (x2) – 682 c. 380 BC. *Obv.* Melcarth on hippocamp. *Rev.* Owl (x2) – SIDON 683 c. 400 BC – 684 c. 375 BC. *Obv.* Warship. *Rev.* Baal in car (x1.75 and x2) – BYBLOS 685 ADRAMELEK, c. 360–340 BC. *Obv.* Warship and hippocamp. *Rev.* Lion attacking bull (x2)

675



677





679 O.



679 R.



680



681



682



683



684



685





686



687



688



689



690



691



ASIA MINOR: VARIOUS

686 UNCERTAIN, c. 550 BC, electrum. *Obv.* Gorgoneion. *Rev.* Stellate incuse (x2) – 687 CARIA, UNCERTAIN, c. 550 BC. *Obv.* Forepart of horse. *Rev.* Punch marks, one with floral pattern (x2) – 688 SINOPE, c. 500–450 BC. *Obv.* Eagle's head. *Rev.* Punch-mark (x2) – 689 SINOPE, c. 400–380 BC. *Obv.* Nymph Sinope. *Rev.* Eagle on dolphin (x2) – 690 DARDANUS, c. 500 BC, electrum. *Obv.* Cock. *Rev.* Incuse square (x2) – 691 DARDANUS, c. 470–450 BC. *Obv.* Horseman. *Rev.* Cock (x2) – 692 COLCHIS, c. 480 BC. *Obv.* Hermaphrodite lion. *Rev.* Minotaur (x3)



692



693 O.



694 O.



695



696 O.



697

LESBOS: TENEDOS

693 LESBOS, c. 480–400 BC, billon. *Obv.* Gorgonion (x4) – 694 LESBOS, c. 480–400 BC, billon. *Obv.* Calves' heads facing (x4) – 695 MYTILENE, c. 450–427 BC, electrum. *Obv.* Female head. *Rev.* Female heads overlapping (x4) – 696 MYTILENE, 427 BC, electrum. *Obv.* Apollo (x4) – 697 TENEDOS, c. 375 BC. *Obv.* Male and female heads joined. *Rev.* Double axe (x2)



698 O.



699 O.



700 O.



701 O.



702 O.



703 O.



704 O.



705 O.



706 O.



707 O.



709 O.



710 O.



714 O.



711 O.



713 O.



712 O.

ICUS (all electrum)

c. 520 BC. *Obv.* Athena (x4) – 699 c. 500 BC. *Obv.* Winged monster, part dolphin, part human (x4) – 700 c. 480 BC. Lioness' head (x4) – 701 c. 500–480 BC. *Obv.* Athena – 702 c. 500 BC. *Obv.* Helios (x4) – 703 c. 500 BC. *Obv.* part of ram (x4) – 704 c. 500 BC. *Obv.* Winged monster, human, part lion (x4) – 705 c. 500 BC. *Obv.* Nike (x4) – c. 500 BC. *Obv.* Satyr (x2) – 707 c. 420 BC. *Obv.* Satyr & cantharus (x2) – 708 c. 520 BC. *Obv.* Heracles (x4) – c. 520 BC. *Obv.* Naked warrior (x4) – 710 c. 520–500 BC. Archer (x4) – 711 c. 440–430 BC. *Obv.* Female head – 712 c. 450–430 BC. *Obv.* Forepart of man-faced bull (x2) – c. 460–440 BC. *Obv.* Ge and Erichthonius (x4) – 714–440 BC. *Obv.* Cecrops (x4) – 715 c. 425 BC. *Obv.* Helios & two horses (x2) – 716 c. 475 BC. *Obv.* Two eagles on a talos (x2) – 717 c. 420 BC. *Obv.* Dionysus (x4)



715 O.



716 O.



717 O.



718 O.



719 O.



718 R.



720



719 R.



721 O.



722 R.



721 R.



722 O.

723 R.

724 R.

725 R.



CYZICUS

718 PHARNABAZUS, c. 413–373 BC. *Obv.* (x4). *Rev.* Prow (x2) – 719 c. 375 BC. *Obv.* Persephone (x4). *Rev.* Lion's head (x2) – 720 c. 394/3 BC. *Obv.* Heracles and snakes. *Rev.* Lion's head (x2) – 721 c. 350 BC, electrum. *Obv.* Portrait head (x4). *Rev.* Incuse square (x2) – 722 c. 350 BC, electrum. *Obv.* Pan (x4) *Rev.* Incuse square (x2) – 723 c. 175 BC. *Obv.* Female head (x2). *Rev.* Torch in wreath (1:1)

CYME

724 c. 189–130 BC. *Obv.* Amazon Cyme ? (x2). *Rev.* Horse (1:1)

MYRINA

725 c. 189–130 BC. *Obv.* Apollo (x2). *Rev.* Apollo (1:1)

HERACLEA PONTICA

726 c. 380–360 BC. *Obv.* Heracles (x2). *Rev.* Nike (x4)



726 O.



726 R.

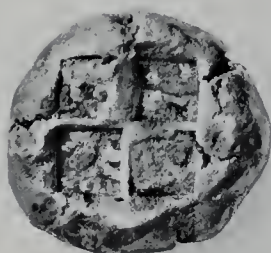
723 O.

724 O.

725 O.



727 O.



727 R.



730 O.

732 O.



733 O.

731 O.

734 O.

735 O.

LAMPUSCUS

727 c. 450 BC, electrum. *Obv.* Forepart of Pegasus (x3). *Rev.* Incuse square (x1.5) – 728 c. 480 BC. *Obv.* Double head. *Rev.* Athena (x3) – 729 c. 350–340 BC, gold. *Obv.* Zeus. *Rev.* Forepart of Pegasus (x3) – 730 c. 380 BC, gold. *Obv.* Satyr (x3) – 731 c. 380 BC, gold. *Obv.* Nike sacrificing ram (x3) – 732 c. 340–330 BC, gold. *Obv.* Cabeirus (x3) – 733 c. 380–370 BC, gold. *Obv.* Maenad (x3) – 734 c. 360–350 BC, gold. *Obv.* Nike erecting trophy (x3) – 735 362 BC, gold. *Obv.* Satrap Orontas (x3)

36 O.



PERGAMUM: KINGS

736 PHILETAERUS, 284–263 BC.

Obv. Seleucus I of Syria (x4). *Rev.* Athena (1:1)

737 EUMENES I, 263–241 BC.

Obv. Philetaerus (x2)

738 ATTALUS I, 241–197 BC.

Obv. Philetaerus (x2). *Rev.* Athena (1:1)

739 EUMENES II, 197–160 BC.

Obv. Philetaerus (x3.5)

736 R.



738 R.



737 O.

738 O.

739 O.





740 O.



741



742



743 O.



745 O.



746 O.



747

SYRIA: KINGS

740 SELEUCUS I, 312-280 BC. *Obv.* Seleucus seated (x4) - 741 SELEUCUS I. *Obv.* Head of a horned horse. *Rev.* Elephant (x2) - 742 ANTIOCHUS I, 280-261 BC. *Obv.* Antiochus I. *Rev.* Apollo with omphalos (x2) - 743 ANTIOCHUS II, 261-246 BC. *Obv.* Antiochus I (x4) - 744 ANTIOCHUS II. *Obv.* Antiochus. *Rev.* Apollo (x2) - 745 SELEUCUS II, 246-226 BC, gold. *Obv.* (x3) - 746 ANTIOCHUS III, 223-187 BC. *Obv.* (x2) - 747 ANTIOCHUS III, *Obv.* Antiochus. *Rev.* Elephant (x2) - 748 ACHAEUS, 220-214 BC. *Obv.* Achaeus (x4). *Rev.* Athena (1:1)



748 R.

748 O.



749 O.



750 O.



751



752



753 O.



754

SYRIA: KINGS

- 749 ANTIOCHUS IV, 175-164 BC, gold. *Obv.*
(x3.5)
750 DEMETRIUS I, 162-150 BC. *Obv.* (x2)
751 ALEXANDER I BALAS, 150-145 BC.
Obv. Alexander. *Rev.* Eagle (x2)
752 ANTIOCHUS VI, 145-142/1 BC.
Obv. Antiochus. *Rev.* Dioscuri (x2)
753 TRYPHON, 142-139 BC. *Obv.* (x4)
754 TRYPHON. *Obv.* Tryphon. *Rev.* Helmet
(x2)



756 O.



755 O.

SYRIA: KINGS

- 755 ALEXANDER I BALAS, 150-145 BC. *Obv.*
Alexander and his wife Cleopatra (x2)
756 CLEOPATRA, 125-121 BC. *Obv.* (x4)
757 DEMETRIUS II, 145-140 and 129-125 BC.
Obv. (x4)
758 DEMETRIUS II. *Obv.* (x2)



757 O.



758 O.



760 O.



763 O.



759 O.



761 O.



762 O.

- SYRIA: KINGS
- 759 ANTIOCHUS VII, 138-129 BC. *Obv.* (x4)
 - 760 ANTIOCHUS VIII, 125-96 BC. *Obv.* Cl. patra and Antiochus (x4)
 - 761 ANTIOCHUS VIII. *Obv.* (x2)
 - 762 ANTIOCHUS VIII. *Obv.* (x2)
 - 763 ANTIOCHUS IX, 116-95 BC. *Obv.* (x4)

765 O.



768 O.



CAPPADOCIA: KINGS

768 OROPHERNES, c. 159-157 BC. *Obv.* (x2)

766 O.



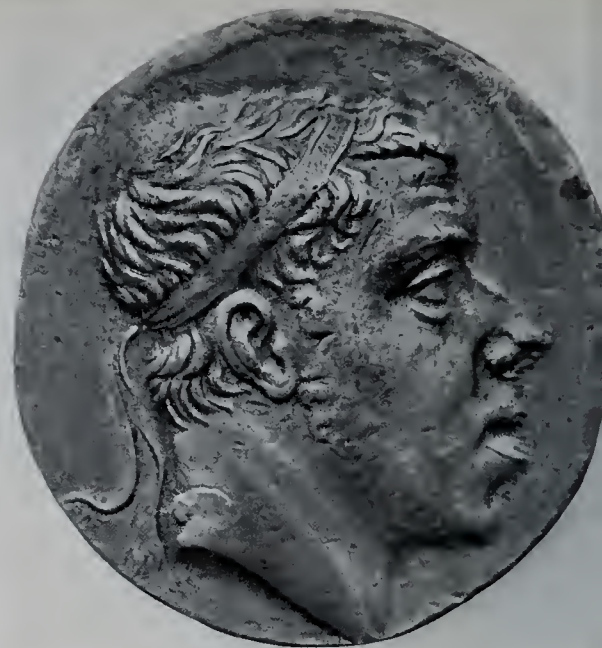
767

BITHYNIA: KINGS

764 PRUSIAS I, c. 229-182 BC. *Obv.* Prusias. *Rev.* Zeus (x2) – 765 PRUSIAS I. *Obv.* (x2) – 766 PRUSIAS II, 182-149 BC. *Obv.* (x2) – 767 NICOMEDES II, 149-127 BC. *Obv.* Nicomedes. *Rev.* Zeus (x2)



769 O.



770 O.



771 O.



772 O.

769 R.

770 R.



771 R.



772 R.

PONTUS: KINGS

- 773 MITHRADATES VI,
120–63 BC.
Obv. Mithradates. *Rev.*
Pegasus (x2.5)
774 MITHRADATES VI,
gold.
Obv. Mithradates.
Rev. Stag (x2)
775 MITHRADATES VI,
Obv. (x4)



773



74



775 O.

PONTUS: KINGS

- 769 MITHRADATES III, c. 220–185/3 BC. *Obv.* Mithradates (x4). *Rev.* Zeus (1:1) – 770 PHARNACES I, 185/3–170 BC. *Obv.* Pharnaces (x2). *Rev.* Male figure (1:1) – 771 MITHRADATES IV, 170–150 BC. *Obv.* Mithradates (x2). *Rev.* Perseus (1:1) – 772 MITHRADATES IV and LAODICE. *Obv.* Mithradates and Laodice (x3). *Rev.* Zeus and Hera (1:1)

777 R.
779 R.

778 R.
780 R.

781 R.
782 R.

776 O.

776 R.



777 O.
779 O.

778 O.
780 O.

781 O.
782 O.

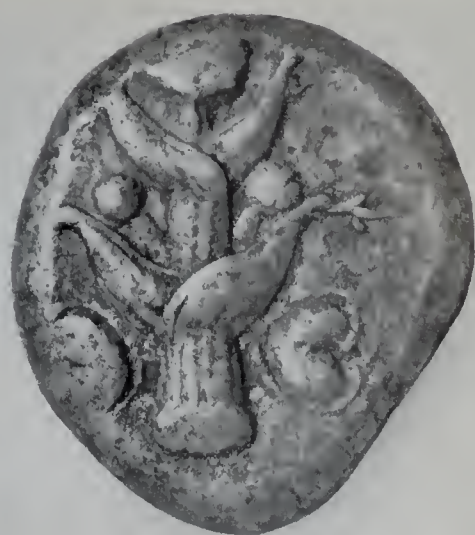
SYRIA, BACTRIA, PARTHIA: KINGS

SYRIA 776 TIGRANES, 83-69 BC. *Obv.* Tigranes (x2). *Rev.* Tyche of Antioch (1:1)

BACTRIA 777 DEMETRIUS, c. 190-170 BC. *Obv.* Demetrius (x2). *Rev.* Heracles (1:1) - 778 ANTIMACHUS I, c. 180 BC. *Obv.* Antimachus (x2). *Rev.* Poseidon (1:1) - 779 HELIOCLES, c. 150-130 BC. *Obv.* Heliocles (x2). *Rev.* Zeus (1:1) - 780 ARCHEBIUS, c. 120 BC. *Obv.* Archebius (x2). *Rev.* Zeus (1:1)

PARTHIA 781 MITHRADATES II, c. 123-87 BC. *Obv.* Mithradates (x2). *Rev.* Parthian king (1:1) - 782 MITHRADATES III, c. 58-55 BC. *Obv.* Mithradates (x2). *Rev.* Parthian king (1:1)

NORTH AFRICA



786

CYRENE

783 c. 550–530 BC. *Obv.* Silphium fruit. *Rev.* Oblong punch-mark (x 2.5). – 784 c. 500 BC. *Obv.* Silphium. *Rev.* Garden of Hesperides (x 2.5) – 785 c. 500 BC. *Obv.* Silphium. *Rev.* Gazelle (x 2.5) – 786 c. 480–470 BC. *Obv.* Zeus Ammon. *Rev.* Silphium and horse (x 4)



787

788

CYRENE

787 c. 470-460 BC - 788 c. 400 BC. *Obv.* Silphium. *Rev.* Zeus Ammon (x4)



790 O.



R.

791 O.

791 R.

RENE

c. 305-304 BC.
Obv. Zeus Ammon.
Rev. Silphium (x4)
 791 c. 322-313 BC, gold.
Obv. Quadriga (x2).
Rev. Zeus (x4)
 c. 308-277 BC.
Obv. Apollo Carneius.
Rev. Silphium (x2)





793



794



795



BARCE

793 c. 440 BC - 794 c. 420 BC - 795 c. 380 BC. *Obv.* Silphium. *Rev.* Zeus Ammon (x4, except no. 795, x2.5)



EGYPT

- 796 PTOLEMY I, Satrap, 323-305 BC.
Obv. Alexander the Great wearing
 elephant scalp. *Rev.* Zeus (x4)
 797, 798 PTOLEMY I, Satrap.
Obv. Alexander the Great wearing
 elephant scalp. *Rev.* Athena (x2.5)



801

EGYPT: KINGS

799 PTOLEMY I, 305–283 BC.

Obv. Ptolemy. *Rev.* Eagle (x4)

801 PTOLEMY II, 285–246 BC, gold.

Obv. Ptolemy II and Arsinoe II. *Rev.* Ptolemy I and Berenice I (x2.5)



PLATE XIX EGYPT
800 PTOLEMY II, 285-246 BC, gold. *Obv.* Head of Ptolemy I (x5)



PLATE XX EGYPT

804 PTOLEMY III, 246-221 BC, gold. *Obv.* Head of Berenice II (x5). *Rev.* See Plate 219

EGYPT: KINGS

- 802 PTOLEMY II, 285-246 BC, gold.
Obv. Arsinoe II (x4). *Rev.* Double cornucopiac (1:1)
- 803 PTOLEMY III, 246-221 BC, gold.
Obv. Ptolemy III (x2). *Rev.* Cornucopiac (1:1)
- 804 PTOLEMY III, gold.
Obv. See Plate XX. *Rev.* Cornucopiac (1:1)
- 805 PTOLEMY III.
Obv. Berenice II (x4). *Rev.* Cornucopiac (1:1)



802 O.



803 O.



802 R.

803 R.

804 R.

805 R.



805 O.



806

807

808

EGYPT: KINGS

- 806 PTOLEMY IV, 221-204 BC, gold. *Obv.* Ptolemy. *Rev.* Eagle (x2) – 807 PTOLEMY IV. *Obv.* Sarapis and Isis. *Rev.* Eagle (x2)
 808 PTOLEMY IV, gold. *Obv.* Arsinoe III. *Rev.* Cornucopiae (x2) – 809 CLEOPATRA VII, 51-30 BC. *Obv.* Cleopatra (x3.5)



809 O.

NOTES ON THE PLATES

All coins are silver unless otherwise stated



Map I. The Greek World. The inset maps marked here will be found, enlarged, as follows:

Map II. Sicily and South Italy, p. 278. Map III. Mainland Greece and Asia Minor, pp. 322, 323. Map IV. The Eastern Mediterranean, p. 324. Each map shows all the relevant Greek mints represented by the coins illustrated. The geographical index, p. 389, locates the map on which any given mint occurs.





II Sicily and South Italy

SICILY

The population of Sicily was mixed; for, apart from the Greek cities established round the coasts from the latter part of the eighth century BC onwards, there were the native Sicels of the interior, the Elymians at the west end of the island, and a number of Carthaginian settlements, the importance of which increased as Carthaginian ambitions in the island grew. Culturally however, though never wholly politically, the Greeks provided the dominant element, for Elymian Segesta was thoroughly Hellenized, the Sicels had no comparable culture, and even the Carthaginians in Sicily adopted Greek designs and in part employed Greek artists for their coinages.

Despite close commercial connexions with other parts of the Greek world, it was not until the second half of the sixth century that coinage appeared in Sicily. This delay must be partly due to the lack of any natural source of silver within the island itself, so that all metal had to be imported; the most likely sources of silver were the Etruscans or southern Spain, controlled by the Carthaginians. For this reason most of the earliest Sicilian mints are to be found on the north and west coasts at Selinus (nos 184–185, Pl. 66), Himera (nos 62–64, Pl. 20) and Zancle (no. 49, Pl. 16) rather than on the south and east, where the major mints were situated later. Naxos (nos 1–5, Pl. 1), on the east coast, is an exception, but will certainly have shared in the trade of the other Chalcidian foundations, Himera and Zancle, who all employed the same weight standard.

Though the idea of minting coins doubtless came to Sicily from mainland Greece, the form which these coins took seems usually to have been determined locally without reference to foreign models. The coins of Naxos, starting in the third quarter of the sixth century, were unique at that time in employing a fully developed die on each face, an idea which was soon followed at Himera (no. 64, Pl. 20), and by the little-known Serdaioi of South Italy, whose coin shows Naxian influence in both fabric and design (no. 224, Pl. 79); at both Zancle (no. 49, Pl. 16) and Himera (no. 63, Pl. 20) the reverse punches have an elaborate formality, which has few parallels elsewhere. Only at Selinus is foreign influence more obvious, where fabric, reverse punch and weight standard recall the early staters of Corinth (nos 478–479, Pl. 152), which Selinus occasionally restruck with her own types. In this insularity Sicily resembles South Italy, where the incuse technique, though it has no true parallel in the rest of the Greek world, was adopted uniformly by all the major mints.

The earliest silver coins, both in Sicily and elsewhere, had tended to be either drachms or didrachms (about 5.5–8.5 gm.), but by the end of the sixth century, perhaps because the exploitation of new sources had lowered the price of silver, there had arisen a demand for larger coins, and the tetradrachm (about 17 gm.) became the commonest denomination. This change is seen first at Syracuse (commencing about 510 BC), and during the fifth century spreads to other mints which had originally coined drachms or didrachms, such as Selinus, Himera, Zancle-Messana, Acragas and Gela. During the fifth century Sicily was predominantly an area of large denominations supported at most mints by only occasional issues of smaller change. This carries certain implications about the uses to which these coins were put, for in the absence of adequate supplies of small change they cannot have served for retail trade. Nor indeed can they have been employed to pay for imports, for Sicilian coins are hardly ever found outside the island. Within the island coins were certainly not confined to the city which issued them, for hoards nearly always contain the issues of a number of cities. The Sicilian coinages are a measure of the prosperity of the island in the fifth century; we know that Acragas exported agricultural produce to Carthage, and eastern Sicily probably exported grain to mainland Greece; there may have been other sources of wealth, the reality of which is attested by the size of cities such as Acragas and Syracuse, by the scale of their surviving buildings – and by their coinages, which represent the island's savings or surplus wealth.

To Syracuse is due the type of the quadriga (no. 72, Pl. 23), which became the most popular Sicilian coin-type, to be adopted sooner or later by almost every mint in the island. Originally an expression of the equine interests of the aristocracies which ruled many Greek cities in the archaic age, it then became a record of the agonistic victories won by the great Sicilian tyrants, under whose rule it appears on the coinages of Gela (no. 157, Pl. 56) and Leontini (nos 13–16, Pl. 5). Elsewhere the use of the quadriga type appears to have little political significance, but to be simply the acceptance of what had come to be a standard design (though with local variation) for the tetradrachm.

At first the race itself was hardly ever shown; the victory has been won, and Nike flies to reward the efforts of the driver or of the horses as they pace sedately back to the paddock. In the last quarter of the century, however, Syracusan artists abandoned this convention and began to experiment with quadrigas in rapid movement; at first unsuccessful (nos 97, 100, Pl. 32), they very quickly produced designs of great skill and complexity, in which each horse has a will and movement of its own

(no. 113, Pl. 39). Sometimes, too, tiny dramatic incidents are introduced: a post has been overthrown by too close a turn, and the driver, hair streaming, looks back anxiously to gauge the position of his nearest competitor (Syracuse, no. 123, Pl. 45); a dangling rein shows that the outermost horse is no longer under control (Syracuse, no. 101, Pl. 33; Acragas, no. 177, Pl. 61); a wheel lying on the ground hints at total disaster. The theme of the racing quadriga became immediately popular and is characteristic of the last issues of those cities overwhelmed by the Carthaginians in the final decade of the fifth century (Selinus, no. 191, Pl. 69; Himera, no. 71, Pl. 22; Acragas, nos 176–181, Pls 61–64; Camarina, no. 152, Pl. 54). In the fourth century it survived as the commonest obverse of the derivative Siculo-Punic tetradrachms (no. 196, Pl. 69).

Any monotony that there may sometimes be in the quadriga design is amply compensated by the variety of other types; here, even when the type remains nominally the same over a long period, as does the head of Arethusa at Syracuse, frequent variation in detail is introduced, so that these heads have an unfailing charm, and were frequently taken as the models for later coinages. To take only two such examples, Cimon's facing head of Arethusa (Syracuse, nos 122, 123; Pls 44, 45) became the model for Larissa (no. 468, Pl. 148), and, adapted as a male portrait, for Lycia (no. 660, Pl. 191), while Eucleidas' facing head of Athena (no. 111, Pl. IV) was also copied in Lycia (no. 655, Pl. 190). Elsewhere in Sicily the portraits of divine beings, whether portrayed as heads or as full length figures, have a complexity and a monumentality, which makes them, as a series, unparalleled in the Greek world.

The Sicilian mints of the fifth century varied much in importance; not surprisingly, Syracuse was probably the only one to maintain anything like continuous production throughout the period; Acragas, Gela and Messana stand in the second rank, while minor and occasional mints included Catana, Leontini, Camarina, Selinus, Himera and Naxos. It is by no means easy to determine what factor induced cities to mint occasional issues. No doubt fluctuations in the local balance of trade and the availability of bullion were necessary conditions; for example, the very heavy Syracusan issues around 480 BC must, in part at least, be accounted for by the enormous Carthaginian indemnity exacted after the battle of Himera in 480 BC. Yet some issues, by their isolation and by the way in which they surpass even the high artistic level of most Sicilian coinages, seem to require some medallion or commemorative occasion, though this is rarely made explicit in their types or legends. The first Syracusan decadrachm (nos 78–80, Pls I and 26, 27) may celebrate the battle of Himera, though a date fifteen years later (in connexion with the expulsion of the Syracusan tyrants) is in some ways preferable (see p. 288 below). The decadrachms of Cimon (nos 116–121, Pls V and 40–43) used to be associated with the defeat of the Athenian attack on Syracuse in 413 BC, but again a date about ten years later is more likely; perhaps they celebrate the withdrawal from Sicily forced upon the Carthaginians by Dionysius of Syracuse in 405 BC. For the decadrachms of Acragas (no. 179, Pls 62, 63), the most splendid of Sicilian coins, no occasion can be suggested other than the victory of a citizen in the Olympic games in 412 BC. The unique tetradrachm of Aetna (no. 33, Pls II and 11) is probably a foundation issue of that short-lived settlement; likewise the early tetradrachm of Naxos (no. 6, Pl. 2)—an isolated issue struck from a single pair of dies—may mark the return home of Naxian exiles *c.* 461 BC after the fall of the Syracusan tyranny, though such an interpretation leaves unexplained the equally fine and equally isolated tetradrachm of about thirty years later (nos 8, 9, Pl. 3).

The Carthaginian invasions of the last decade of the fifth century abruptly cut short all the Greek coinages of Sicily except that of Syracuse, so that the fourth century down to the revival of the Greek cities under Timoleon shows a very different picture from the fifth. Syracuse, indeed, was still able to produce on the decadrachms of Euaenetus (nos 104–106, Pls 34–36) a version of Arethusa's head, which enjoyed a popularity all over the Greek world far exceeding that of any previous version. From the number of dies employed these decadrachms evidently formed something more than a medallion issue and, in fact, constituted the main silver coinage of the latter part of the reign of Dionysius I. Curiously, they seem to have been accompanied not by numerous smaller silver denominations, but by an extensive gold coinage (nos 126–129, Pls VI, VII and 46). In the rest of Sicily, apart from much old coinage surviving in circulation, the only substantial silver coinages were those being struck at various centres by the Carthaginians for use in Sicily. The coinage of Syracuse usually provided the models (nos 195, 196, Pl. 69; no. 206, Pl. 72), and sometimes the dies were cut by Greek engravers, who no longer found employment in their native cities (*e. g.* no. 206, Pl. 72), but more often a certain awkwardness betrays the non-Greek artist (nos 195, 196, Pl. 69). The principal function of these fourth century coinages was certainly the payment of the mercenary troops, with which the almost continuous wars of the period were fought; many of the Siculo-Punic issues bear inscriptions which specifically proclaim their military purpose (nos 205–209, Pls 72, 73).

In 344 BC the Corinthian Timoleon landed in Sicily and in a few years succeeded in confining the Carthaginians to the west end of the island and in freeing the Greek cities from their oppressive tyrants. The arrival of many thousands of settlers from abroad produced a certain revival, though Sicilian coinage never regained anything approaching the brilliance of the fifth century. The record of hoards shows that in the second half of the century large numbers of the coins of Corinth (such as nos 487, 488, Pl. 153) and her colonies were flowing into Sicily, where they formed the normal currency of the island. So great was the demand for these coins in Sicily and South Italy that not only were the technical processes of the mint of Corinth revised to multiply the output of dies, but their types were also copied at some western mints, notably Syracuse (no. 132, Pl. 47) and Locri. The economic forces which attracted these coins from mainland Greece to Sicily are still obscure; no doubt the new settlers brought some resources with them, but the phenomenon seems more general, and a rapid agricultural revival should prob-

ably be postulated, whereby Sicily was again enabled to export her surplus produce. At the same period gold and electrum coinages were in use (nos 130, 131, 133, Pls 46, 47).

The remaining coinage of Sicily is still concentrated at Syracuse. In part it consists of spiritless versions of traditional designs (nos 134, 138, Pls 48, 49); when it follows contemporary fashions, it reflects the coinages of the Hellenistic monarchies of the east Mediterranean. The heads of Philistis (nos 140, 141, Pl. 49), Hieron II (no. 142, Pl. 50), Gelon II (no. 143, Pl. 51) and Hieronymus (no. 144, Pl. 51) would not look out of place in the contemporary Seleucid or Ptolemaic series.

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NAXOS

This was the earliest Greek colony in Sicily, founded from Chalcis in Euboea in 735 BC (Thuc. vi, 3), though its name has been thought to imply some connexion with the Aegean island of Naxos. Its site is roughly where a ship from the southern shores of Italy would most readily encounter the Sicilian coast. Never a major city, its coin types suggest that it depended mainly on the production of wine; the types of the Aegean island show a similar concentration upon Dionysus.

Its earliest coinage, one of the first in Sicily, began near the middle of the sixth century, and was brought to an end when the town was incorporated into the dominions of Hippocrates of Gela c. 490 BC; some nineteen obverse dies were required for the drachmae of this phase (nos 1–5, Pl. 1). In 476 BC the population of Naxos was removed to Leontini by Hieron of Syracuse; they returned to their original home only c. 461 BC after the fall of the Syracusan tyranny. The tetradrachm (no. 6, Pl. 2) may celebrate this event; struck from a single pair of dies this remarkable coin survives in well over fifty specimens. It was accompanied by a substantial number of drachmae (no. 7, Pl. 2) and litrae.

About thirty years later comes another isolated tetradrachm, again from a single obverse die. The final phase, from c. 420–403 BC, consists of a few tetradrachms (no. 12, Pl. 4), a number of didrachms (no. 11, Pl. 4) and smaller denominations (no. 10, Pl. 3). In 403 BC Naxos was destroyed by Syracuse.

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Plate 1

1 NAXOS, c. 530–510 BC Drachma: 5.36 gm.

Obv. Head of bearded Dionysus wearing ivy-wreath. *Rev.*

Vine-tendril with cluster of grapes and two leaves; *NAXION*

Hess/Leu 16. 4. 1957, 89. Cahn 1.

2 NAXOS, c. 530–510 BC Drachma: 5.78 gm.

As no. 1, but *rev.* legend retrograde.

Hess/Leu 12. 4. 1962, 77. Cf. Cahn 5 (V 4/R–).

3 NAXOS, c. 530–510 BC Drachma.

As no. 2.

Priv. coll. Cf. Cahn 5 (V4/R–).

4 NAXOS, c. 510–490 BC Drachma: 5.65 gm.

As no. 1.

London (BM); PCG, pl. 7, 26. Cahn 48.

5 NAXOS, c. 510–490 BC Drachma.

As no. 1.

Priv. coll. Cf. Cahn 41 (V29/R–).

Plate 2

6 NAXOS, c. 460 BC Tetradrachm: 17.44 gm.

Obv. Head of bearded Dionysus wearing ivy-wreath. *Rev.* Squatting ithyphallic Silenus holding cantharus; he has animal's ears, and his tail emerges from behind his right leg; *NAXION*

London (BM); PCG, pl. 15, 48. Cahn 54.

7 NAXOS, c. 460 BC Drachma: 4.32 gm.

As no. 6, but on rev. tail behind left leg.

Pennisi. Cahn 55.

Plate 3

8 NAXOS, c. 430–420 BC Tetradrachm: 17.31 gm.

Obv. Head of bearded Dionysus, wearing a band ornamented with ivy in relief. *Rev.* (not shown). As no. 9.

Priv. coll. Cahn 102.

9 NAXOS, c. 430–420 BC Tetradrachm: 15.09 gm.

Obv. (not shown). Same die as no. 8. *Rev.* Silenus squatting on ground from which grows an ivy-branch on l.; he holds a cantharus and thyrsus; *NAEION*

Pennisi. Cahn 103.

10 NAXOS, c. 420–403 BC Litra: 0.67 gm.

Obv. Head of young Dionysus wearing ivy-wreath. *Rev.* Vine-tendril with cluster and two leaves; *NAEION*

Priv. coll. Cahn 139.

Plate 4

11 NAXOS, c. 420–403 BC Didrachm: 8.67 gm.

Obv. Head of Apollo wearing laurel wreath; to l., laurel leaf and berry; *NAEION*. *Rev.* Silenus kneeling on two steps holds cantharus and thyrsus; on l., bearded herm; on r., stem of ivy; on l. face of lower step, *ΠΡΟΚΛΗΣ* (artist's signature).

Priv. coll. Cahn 108.

12 NAXOS, c. 420–403 BC Tetradrachm.

Obv. Head of young Dionysus wearing ivy-wreath; *NAEION*. *Rev.* Silenus sitting on wine-skin, holding cantharus and ivy-branch; over his l. knee, a half-filled wine-skin; on l., a bramble.

Naples. Cahn 106.

LEONTINI

Leontini was founded from Naxos in 729 BC (Thuc. vi, 3) and is thus another Chalcidian colony. On an inland site previously occupied by the native Sicels, it dominated the fertile plain to the north; the four grains which are a normal feature of the reverses of Leontini, and which are sometimes shown sprouting (no. 14, Pl. 5), allude to this agricultural wealth.

The coinage is obviously based upon the earlier coinage of Syracuse. The quadriga of the obverse is the same at both mints, and one die was actually used in both series; on the reverse the pattern of lion's head surrounded by four grains is the same as that of Arethusa and her circling dolphins at Syracuse; in the one case a punning allusion to Leontini, surrounded by her fields of grain, in the other the goddess of the freshwater spring on the island where Syracuse began, surrounded by the dolphins of the sea. The parallelism extends even to the smaller denominations (cf. no. 17, Pl. 5 with no. 77, Pl. 25).

Leontini was captured by Hippocrates of Gela c. 495 BC, but the coinage cannot have begun until Hippocrates' successor, Gelon, transferred his capital from Gela to Syracuse in 485 BC. The establishment of a vassal tyrant, Aenesidemus, in Leontini will explain the existence of an independent, yet related, coinage, which for a while runs parallel with the Syracusan; this phase culminates in those issues at Leontini (nos 18, 19, Pl. 6) which are directly copied from the 'Demareteion' at Syracuse (nos 78–80, Pls I and 26, 27).

In 466 BC the tyrant dynasty was expelled from Syracuse, and the vassal tyranny probably collapsed at Leontini at about the same time. To this political change will be due the replacement of the Syracusan quadriga by the head of Apollo (nos 20–26, Pls 7–9), whose beast, the lion, already occupied the reverse. Further change was confined to stylistic development, and the occasional addition of a symbol to the reverse (e. g. no. 22, Pl. 7). The coinage came to an end when Leontini once again became a dependency of Syracuse in 422 BC.

A rough estimate of the size of the coinage of Leontini yields about sixteen obverse dies for tetradrachms in the quadriga series, and about twenty-five for the subsequent Apollo heads.

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Plate 5

13 LEONTINI, c. 485–466 BC Tetradrachm.

Obv. Quadriga, horses walking; Nike crowns horses. *Rev.* Lion's head; around, four barley grains; *AEONTINO*.
Pennisi.

14 LEONTINI, c. 485–466 BC Tetradrachm: 17.07 gm.

Obv. (not shown). As no. 13. *Rev.* As no. 13, but *AEONTI-*
NON.

Priv. coll.

15 LEONTINI, c. 485–466 BC Tetradrachm: 17.13 gm.

As no. 14.

London (BM); *PCG*, pl. 7, 23.

16 LEONTINI, c. 485–466 BC Tetradrachm.

As no. 14.

Priv. coll.

17 LEONTINI, c. 485–466 BC Didrachm: 8.79 gm.

Obv. Bearded, naked horseman holding whip and bridle.

Rev. As no. 14.

Hess/Leu 16. 4. 1957, 82.

Plate 6

18 LEONTINI, c. 479 BC Tetradrachm: 16.35 gm.

Obv. Quadriga, horses walking; Nike crowns charioteer; in ex., lion. *Rev.* Head of Apollo wearing laurel-wreath; around, three laurel leaves; in ex., lion pouncing; *AEONTINON*

London (BM); *PCG*, pl. 15, 44.

19 LEONTINI, c. 479 BC Tetradrachm: 17.25 gm.

As no. 18.

Berlin.

Plate 7

20 LEONTINI, c. 466–460 BC Tetradrachm: 17.24 gm.

Obv. Head of Apollo wearing laurel wreath. *Rev.* Lion's head; around, four barley grains; *AEONTINON*

Priv. coll.

21 LEONTINI, c. 466–460 BC Tetradrachm.

Obv. Head of Apollo, wearing laurel wreath; hair in chignon.

Rev. As no. 20.

Syracuse.

22 LEONTINI, c. 460–450 BC Tetradrachm: 17.23 gm.

Obv. As no. 21, but hair rolled on neck. *Rev.* As no. 20, but a tripod replaces barley grain on left.

Brussels; *Colln. Hirsch* 442.

Plate 8

23 LEONTINI, c. 460–450 BC Tetradrachm: 16.94 gm.

As no. 20.

Priv. coll.

24 LEONTINI, c. 450 BC Tetradrachm.

Obv. As no. 22, but to l. *Rev.* As no. 23, but to l.

Priv. coll.

Plate 9

25 LEONTINI, c. 440 BC Drachma.

Obv. Head of Apollo, wearing laurel wreath; hair in chignon.

Rev. As no. 20.

Priv. coll.

26 LEONTINI, c. 425 BC Tetradrachm: 17.07 gm.

As no. 20.

Brussels; *Colln. Hirsch* 444.

27 LEONTINI, c. 425 BC Litra: 0.82 gm.

Obv. Lion's head; *AEON* (retrograde). *Rev.* Young naked river-god holding branch and sacrificing from phiale over rectangular altar; to l., barley grain.

Berlin; Regling 557.

CATANA AETNA

Founded at the same time as Leontini (729 BC), Catana was also a colony of Sicilian Naxos; between them Catana and Leontini dominated the northern and southern edges respectively of the fertile plain south of Etna. Like Leontini, too, Catana fell into the power of the Syracusan tyrants, for in 476 BC Hieron expelled its inhabitants to make way for a mixed colony of Syracusans and Peloponnesians, and changed its name to Aetna.

To this new and short lived foundation belongs the remarkable tetradrachm (no. 33, Pls II and 11), which survives in a single specimen only. With the first tetradrachm of Naxos (no. 6, Pl. 2) and the 'Demareteion' at Syracuse (nos 78–80, Pls. I and 26, 27), it is one of the masterpieces of Sicilian monetary art from the two decades following 480 BC; it has been suggested that all three should be seen as the work of the same engraver.

After the fall of the Syracusan tyranny, in 466 BC, the former inhabitants of Catana returned to their old home, and it was only then that coinage in the name of Catana itself began. These issues, with the local river-god, Amenanos, as a man-faced bull on the obverse (nos 28–32, Pls 10, 11), have sometimes been attributed to the period before the foundation of Aetna in 476 BC, but so early a date is hardly possible for these elaborate tetradrachms; in particular, the sea monster in the obverse exergue (nos 28, 30, Pl. 10) was taken from the Syracusan issues (nos 83, 85, Pls 28, 29), which did not start earlier than 474 BC, and on which it remained a constant feature until the middle of the century.

About 450 BC the types of Catana were changed to quadriga (obv.) and head of Apollo (rev.), which remained in use for tetradrachms until the city lost its independence to Dionysius of Syracuse in 403 BC. From about 410 BC Syracusan influence is strong; one engraver, Euaenetus, was working for both mints (Catana, nos 38, 42, Pls 13, 14; Syracuse nos 101, 104, 105, Pls 33–35), and there is also an affinity between the facing Apollo heads of Heracleidas at Catana (nos 43, 44, Pls III and 15) and Cimon's facing heads of Arethusa at Syracuse (nos 122, 123, Pls 44, 45). Finally, attention should be drawn to the drachmae with the wonderful heads of the same river-god (nos 38, 39, Pl. 13), who had appeared earlier as the primitive man-faced bull (nos 28–32, Pls 10, 11); a similar transformation from bull to youthful god took place at Gela (nos 160–163, Pl. 57 with nos 164–166, Pl. 58).

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Plate 10

28 CATANA, c. 460–450 BC Tetradrachm.
Obv. River-god in form of man-faced bull; above, a kneeling Silenus crowns him; in ex., sea monster. *Rev.* (not shown).
As no. 29.
Pennisi.

29 CATANA, c. 460–450 BC Tetradrachm.
Obv. As no. 28, but above, branch; in ex., fish. *Rev.* Nike holding ribbon in r. hand; *KATANE*
Priv. coll.

30 CATANA, c. 460–450 BC Tetradrachm.
Obv. As no. 28. *Rev.* (not shown). As no. 29.
Ognina hoard; *Atti e Mem.* V (1925), Pl. I, 6.

31 CATANA, c. 460 BC Tetradrachm.
Obv. As no. 29, but above, water bird. *Rev.* Nike flying holding two branches; below, murex; *KATANE*.
Ognina hoard; *Atti e Mem.* V (1925), Pl. I, 3.

Plate 11

32 CATANA, c. 460–450 BC Tetradrachm: 17.29 gm.
Obv. As no. 31. *Rev.* Nike holding wreath in r. hand, and dress in l.; *KATANAIION*.
London (BM); *PCG*, pl. 7, 20.

Plate II

33 AETNA, c. 475–470 BC Tetradrachm: 17.23 gm.
Obv. Head of Silenus, wearing ivy-wreath; below, beetle; *AITNAION*.

Plate 11

Rev. Zeus sitting on a seat, over which a lion's skin is thrown; in his l. hand he holds a winged thunderbolt, in his r., a knotted staff; before him, an eagle perched on a pine tree.
Brussels; *Colln. Hirsch* 269.

34 AETNA, c. 470 BC Litra: 0.68 gm.
Obv. Head of Silenus, wearing ivy wreath. *Rev.* Winged thunderbolt; *AITN*.
Brussels; *Colln. Hirsch* 270.

Plate 12

35 CATANA, c. 450–440 BC Tetradrachm.
Obv. Quadriga, horses walking. *Rev.* Head of Apollo, wearing laurel wreath; *KATANAIION*.
Priv. coll.

36 CATANA, c. 450–440 BC Tetradrachm: 17.25 gm.
As no. 35.
Priv. coll.

Plate 13

37 CATANA, c. 430 BC Tetradrachm: 17.30 gm.
Obv. (not shown). As no. 35, but Nike flies to crown horses. *Rev.* As no. 35, but *KATANAIOS*.
Paris; *Colln. de Luynes* 894.
Note. This coin has been overstruck upon a coin of Selinus similar to no. 186 (Pl. 66). On the edge, to the left of the head of Apollo, can be seen (from l. to r.) the outline of the altar, part of the cock, the feet of the young god, part of the bull standing on a basis, and part of the wild parsley leaf.

38 CATANA, c. 415 BC Drachma.
Obv. Quadriga, horses galloping; above, Nike crowns rider; in ex., *KATANAIION*. *Rev.* Head of young river-god, Amenanos, horned, hair in fillet; around, two fish and a prawn; above, *AMENANOS*; below, *EYAI* (= Euainetos, artist's signature).
Pennisi.
Note. For a similar quadriga by Euaenetus compare Syracuse no. 101 (Pl. 33).

39 CATANA, c. 415 BC Drachma: 4.20 gm.
As no. 38, but no signature on rev.
Hess/Leu 12. 4. 1962, 55.

Plate 14

40 CATANA, c. 410–403 BC Tetradrachm: 17.10 gm.
Obv. Quadriga, horses galloping; Nike flies to crown charioteer. *Rev.* (not shown). As no. 41.
Berlin.

41 CATANA, c. 410–403 BC Tetradrachm: 17.18 gm.
Obv. (not shown). As no. 40. *Rev.* Head of Amenanos, hair in fillet; *KATANAIΩN*.
 Paris.

42 CATANA, c. 410–403 BC Tetradrachm: 16.88 gm.
Obv. Quadriga, horses galloping; below, pellet; on r., turning post; above, Nike flies to crown charioteer and carries tablet inscribed *EYAIN* (= Euainetos, artist's signature); in ex., crab. *Rev.* Head of Apollo wearing laurel wreath; to l., bell on the end of knotted fillet; to r., prawn.
 Berlin; Regling 554.
Note. For the motif of Nike carrying the same artist's name on a tablet, compare Syracuse no. 101 (Pl. 33).

Plate 15

43 CATANA, c. 410–403 BC Tetradrachm.
Obv. Head of Apollo facing, wearing laurel wreath; on r., *HPAKAEIΔΑΣ* (artist's signature). *Rev.* Quadriga, horses galloping; above, Nike flies to crown charioteer; in ex., *KATANAIΩN*.
 Priv. coll.

Plate III

44 CATANA, c. 410–403 BC Tetradrachm: 16.82 gm.
Obv. Same die as no. 43. *Rev.* (not shown). As no. 43.
 London (BM); *PCG*, pl. 14, 33.

Plate 15

45 CATANA, c. 420 BC Litra: 0.71 gm.
Obv. Head of Silenus, wearing ivy wreath. *Rev.* Winged thunderbolt; l. and r., shields ornamented with stars; above, l. and r., pellets; *KATANAIΩN*.
 Priv. coll.

46 CATANA, c. 420–410 BC Drachma: 4.18 gm.
Obv. Head of Silenus facing. *Rev.* (not shown). Head of Amenanos; as no. 47.
 Berlin.

47 CATANA c. 410 BC Drachma: 4.17 gm.
Obv. (not shown). As no. 46. *Rev.* Head of young god, hair in fillet (as no. 41); on neck, *A* (artist's signature?); to r., laurel leaf and berry; *KATANAIΩN* (retrograde).
 Berlin; Regling 548.

ZANCLE-MESSANA

Founded, like the other Chalcidian colonies, in the late eighth century BC, Zancle, together with Rhegium across the water, was evidently intended to secure the straits, and to live off the traffic passing through them. The sickle-shaped sand-bar which enclosed the harbour gave the place its name (from the Sicilian word for a sickle), and forms the obverse type of the earliest coinage (nos 48, 49, Pl. 16); this did not begin before 525 BC, and was terminated in 494 BC by the treacherous capture of the town by the Samian refugees from Ionia, as related by Herodotus (vi, 22 ff.). No. 49 is a late example of this series. No. 48, instead of the usual shell on reverse, repeats the obverse type incuse, the only occurrence of this South Italian technique in Sicily; this seems to be a late variation adopted for reasons now unknown (Milne, *NC* 1938, pp. 36ff.).

To the brief Samian occupation are to be attributed coins which, despite their Samian types, are shown by both weight standard and finds to have been struck in the west Mediterranean (no. 613, Pl. 182). About 489 BC the Samians were expelled by Anaxilas, tyrant of Rhegium, who issued a new coinage bearing types that were already in use at Rhegium (no. 50, Pl. 16; cf. no. 281, Pl. 98); at the same time Anaxilas changed the name of the town to Messina, partly because he was himself of Messenian origin, and partly because he had established there a body of Messenian exiles in place of the expelled Samians.

A few years later (484 or 480 BC) Anaxilas introduced at both Messina and Rhegium the mule-car and hare types (nos 51, 52, Pl. 16), which remained essentially unchanged at Messina until the Carthaginian capture of the city in 396 BC. From about 460 BC Nike flies to crown the mules on the obverse, and from about 430 BC the legend is modernized by the introduction of the four-barred sigma, by the driver becoming a female instead of male, and by a symbol accompanying the hare on reverse (nos 54–61, Pls 17–19).

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Plate 16

48 ZANCLE, c. 510 BC Drachma: 5.68 gm.
Obv. The sickle-shaped harbour of Zancle; within, a dolphin; *ΔΑΝΚΛΕ*. *Rev.* (not shown). Same type incuse.

London (BM); *PCG*, pl. 7, 24. Gielow 3.
Note. Danklon was an old Sicilian word for a sickle, the town being so named on account of the shape of its harbour.

49 ZANCLE, c. 500 BC Drachma: 5.61 gm.
Obv. As no. 48. *Rev.* A design of four sunk triangles and three sunk squares with cockle-shell in centre square.
 Priv. coll. Cf. Gielow 31.
Note. At this point should be inserted no. 613 (Pl. 182) representing the coinage of the Samian refugees at Zancle from 493 to 489 BC.

50 MESSANA, c. 489–480 BC Stater (3 drachms): 17.35 gm.
Obv. Lion's head facing. *Rev.* Calf's head; *MEΣΣENION*.
 Paris; *Colln. de Luynes* 1010.

51 MESSANA, c. 480–460 BC Tetradrachm: 17.37 gm.
Obv. Biga of mules with bearded male driver; in ex., laurel leaf and berry. *Rev.* (not shown). As no. 52, but without *A*.
 Berlin; Regling 388.
Note. For these types at Rhegium see no. 281 (Pl. 98).

52 MESSANA, c. 460 BC Tetradrachm: 17.30 gm.
Obv. (not shown). As no. 51, but above, Nike flies to crown mules. *Rev.* Hare; above, *A*; *MEΣΣENION*.
 Paris; *Colln. de Luynes* 1012.
Note. The letters *B*, *Γ* and *Δ* also occur; these may represent four successive annual issues dated by the letters of the alphabet in sequence; cf. no. 221 (Pl. 78).

Plate 17

53 ZANCLE, c. 460 BC Tetradrachm: 17.05 gm.
Obv. Zeus, naked except for chlamys over shoulders, brandishes thunderbolt in r. hand and extends l.; to r., high rectangular altar decorated with palmette and volutes.
Rev. Dolphin and cockle-shell; *ΔANKAAION*.
 Brussels; *Colln. Hirsch* 466.
Note. The name Zancle here occurs in isolation some thirty years after its last use on no. 49 (Pl. 16); this coin may have been struck at some place where refugees from Zancle had settled, after Anaxilas of Rhegium had captured the town, imported Messenian settlers and changed its name to Messana. For a discussion of the types of this unique coin see A. Mertens, 'La tétradrachme à légende *ΔANKAAION*', *Rev. Belge* 1947, pp. 19ff.

54 MESSANA, c. 430–410 BC Tetradrachm: 17.18 gm.
Obv. Biga of mules with female driver (Messana); above, Nike flies to crown mules; in ex., two dolphins. *Rev.* Hare; below, dolphin; *MEΣΣANION*.
 Priv. coll.

55 MESSANA, c. 430–410 BC Tetradrachm.
Obv. As no. 54, but above, *MEΣΣANA* in place of Nike.

Rev. As no. 54, but below, ear of barley.
 Pennisi.

Plate 18

56 MESSANA, c. 430–410 BC Tetradrachm.
Obv. As no. 55. *Rev.* As no. 54.
 Priv. coll.

57 MESSANA, c. 420–410 BC Tetradrachm: 17.93 gm.
Obv. As no. 55. *Rev.* Pan seated on a rock, over which a skin is thrown; he holds a throwing stick in his l. hand, and plays with a leaping hare with his r.; *IIAN*.
 Paris; *Colln. de Luynes* 1022.

58 MESSANA, c. 410–396 BC Tetradrachm: 17.26 gm.
Obv. Biga of mules with female driver; above, Nike flies to her carrying wreath and fillet; in ex., two dolphins. *Rev.* As no. 54, but below, young male head, horned, with hair in fillet (Pan).
 Brussels; *Colln. Hirsch* 468.

Plate 19

59 MESSANA, c. 410–396 BC Tetradrachm.
Obv. As no. 58, but Nike carries wreath and caduceus; in ex., a fish; on ex. line, *ΣΙΜΙΑ* –? (artist's signature). *Rev.* Hare; below, eagle on rock attacking snake; *MEΣΣANION*.
 Pennisi.
Note. The type of eagle attacking prey is a constant theme on the coinage of Acragas in the years before its destruction by the Carthaginians in 406 BC (cf. nos 173–183, Pls 60–65); the eagle and snake finds its closest parallel on the small gold coins, which may have been struck actually during the Carthaginian siege; no. 59 cannot be far in date from the Acragantine gold. The signature on the obverse has sometimes been read as *KIMΩN* (J. H. Jongkees, 'La Graveur Cimon à Messana', *Rev. Belge* 1954, pp. 25ff.).

60 MESSANA, c. 410–396 BC Tetradrachm.
Obv. As no. 58, but mules pacing, and no dolphins in ex. *Rev.* Hare running past three ears of barley; below, *MEΣΣANION* between two lines.
 Ognina hoard.
Note. A very similar design, but with hound replacing hare, occurs at Segesta in the last decade of the fifth century; cf. no. 200 (Pl. 70).

61 MESSANA, c. 410–396 BC Tetradrachm.
Obv. As no. 58. *Rev.* Hare running; below, ear of barley; above, bird; in ex., *MEΣΣANION*.
 Syracuse.

HIMERA

The somewhat isolated position of Himera, far to the west along the north coast of Sicily, probably indicates that by the date of its foundation from Zancle (649 BC) all the more accessible sites had already been occupied. The cock on the obverse of the earliest coins (nos 62–64, Pl. 20) may point to Carystus in Euboea as the original home of some of the settlers. This coinage began

in the last quarter of the sixth century and ended – or rather was modified—when Theron, tyrant of Acragas, occupied Himera c. 482/1 BC. To this time clearly belong the coins on which the crab of Acragas occupies the reverse (no. 65, Pl. 20; *cf.* no. 169, Pl. 59); the denomination also is changed from a Chalcidian drachm to a Euboeic didrachm to conform with the coinage of Acragas. This is one of the few coins at this time which can be certainly connected with a known historical event.

Himera recovered her independence in 472 BC; shortly after this begins the quadriga/nymph series, which lasts until the Carthaginian destruction in 409 BC (nos 66–71, Pls 20–22). A frequent feature of the reverses is a satyr bathing in a fountain with a lion's-head spout; this alludes to the hot springs in the neighbourhood of Himera, which also gave their name to *Thermae*, the settlement founded by the Carthaginians in 407 BC.

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Plate 20

62 HIMERA, c. 520–500 BC Drachma.

Obv. Cock. *Rev.* (not shown). Incuse square of 'windmill' pattern.

Pennisi.

63 HIMERA, c. 520–500 BC Drachma: 5.80 gm.

As no. 62.

London (BM); *PCG*, pl. 7, 22.

64 HIMERA, c. 500 BC Drachma.

Obv. As no. 62, but two uncertain letters in field. *Rev.* Hen within incuse square.

Priv. coll.

65 HIMERA, c. 480–470 BC Didrachm: 8.69 gm.

Obv. Cock; *HIMEPA* (retrograde). *Rev.* Crab.

Berlin; Regling 379.

66 HIMERA, c. 470–450 BC Didrachm: 8.59 gm.

Obv. Youth dismounting from jumping horse; in ex., *IMEPAION*. *Rev.* Nymph Himera, wearing peplos and chiton, raising l. hand, and sacrificing from phiale over cylindrical altar surmounted by palmette and volutes; on r., caduceus with fillet tied in bow; *ΣΟΤΗΡ* (= Saviour).

Berlin; Regling 383 Gutmann/Schwabacher 1.

Plate 21

67 HIMERA, c. 460–450 BC Tetradrachm: 17.12 gm.

Obv. Pelops in biga; in ex., palm branch and bunch of dates; *ΠΕΛΙΟΣ*. *Rev.* Nymph Himera standing, raising l. arm; *IMEPA* (retrograde).

London (BM); *PCG* pl. 15, 40. Gutmann/Schwabacher 13.

68 HIMERA, c. 440–430 BC Tetradrachm.

Obv. (not shown). Same die as no. 70. *Rev.* Nymph Himera sacrificing as on no. 66; to r., a fountain with water-spout in form of lion's head, under which satyr bathes; above, a corn grain.

Priv. coll. Gutmann/Schwabacher 15.

Note. 'The engraver allows us to see into the brimming trough in which the satyr stands knee-deep in water. Below the knee his legs disappear beneath the surface and are refracted in so doing' (SNG II, no. 1019).

Plate 22

69 HIMERA, c. 440–430 BC Tetradrachm: 17.18 gm.

Obv. (not shown). Same die as no. 70. *Rev.* As no. 68.

Paris; *Colln. de Luynes* 975. Gutmann/Schwabacher 18.

70 HIMERA, c. 440–430 BC Tetradrachm: 17.19 gm.

Obv. Quadriga; above, Nike flies to crown driver; in ex., *IMEPAION* (retrograde). *Rev.* (not shown). As no. 68.

London (BM); *PCG*, pl. 15, 42. Gutmann/Schwabacher 16.

71 HIMERA, c. 410 BC Tetradrachm: 17.50 gm.

Obv. Quadriga with horses galloping; above, Nike flies to crown female driver, and carries tablet inscribed *M?*] *AI*; in ex., sea monster. *Rev.* As no. 68, but altar rectangular with two projections on top; in ex. and around *ΙΙ* (*MEPAION*).

Paris; *Colln. de Luynes* 977. Gutmann/Schwabacher 20

Note. This was presumably the last issue before Himera was destroyed by the Carthaginians in 409 BC.

SYRACUSE

In 733 BC (Thuc. vi, 3) Corinth founded what very quickly became the greatest city in Sicily. From an early date Syracuse included not only the off-shore island of Ortygia, but part of the adjacent mainland as well; her two harbours, the best on this coast, made her an important entrepôt for trade with the Sicels and with other Greek colonies. Gelon's decision to transfer his capital from Gela in 486 BC gave Syracuse for about twenty years a small empire in south-east Sicily, which was maintained and extended

by his brother, Hieron; after his death, however, the subject cities regained their independence, though the material prosperity of Syracuse does not seem to have been greatly affected thereby.

Syracusan coinage probably started about 515 BC, in the last thirty years, that is, of the rule of the traditional aristocracy, soon to be superseded by the tyrant Gelon in 485 BC. Syracuse differed from other Sicilian mints in coining tetradrachms from the start, perhaps an indication that silver was more readily available there than elsewhere. The earliest issue resembles no. 72 (Pl. 23) except that the head of Arethusa is missing from the reverse. This Arethusa head in a small medallion (nos 72, 73, Pl. 23) lasted into the early fifth century, when the reverse design was drastically altered; the medallion was abandoned (surviving sometimes only as a linear circle as no. 75, Pl. 24), the head was much enlarged and elaborated, and (a stroke of genius) the four fragmentary elements of the incuse square were transformed into four circling dolphins, so that the whole type represented the fresh-water spring (Arethusa) on the island of Ortygia amid the surrounding sea; at the same time the legend was transferred from obverse to reverse (nos 74, 75, Pl. 24). This change took place a few years before Gelon made Syracuse his capital in 485 BC.

From this date there is a very marked increase in the activity of the Syracusan mint, for the next stage of the coinage required no less than 137 obverse dies for tetradrachms (*e. g.* no. 76, Pl. 25), and culminated in one of the finest of all Sicilian coins, the decadrachm known as the 'Demareteion' (nos 78–80, Pls I and 26, 27). This coin requires some discussion, for much of the chronology of Sicilian coinage at this time depends upon its date and interpretation.

Diodorus (xi, 26, 3) reports that after the battle of Himera in 479 BC the defeated Carthaginians obtained an unexpectedly favourable peace from Gelon of Syracuse through the intervention of his wife, Demarete; in their gratitude they presented her with a gold crown worth (or weighing) a hundred talents; from this was struck a coin called the Demareteion, which weighed fifty litrae or ten Attic drachmae. This account contains a fundamental contradiction: the metal given by the Carthaginians—and therefore, presumably, the coin struck from it—was gold, yet its *weight*, given as ten Attic drachmae (or fifty Sicilian litrae), could only be that of a silver coin.

Among the surviving coins there is a suitable silver decadrachm, but no Syracusan gold of this date is known; the silver decadrachm, therefore, has long been labelled the 'Demareteion' and confidently dated to 479 BC. Though the question cannot be fully argued here, this identification involves difficulties of which the greatest is that it requires the concentration of a very large coinage into the years *c.* 485–479 BC, and allows very little to the years following 479 BC, when we know that Syracuse was receiving huge quantities of bullion as an indemnity from Carthage. The silver decadrachm is certainly an exceptional issue, and may be commemorative; a date near 466 BC, when the tyrants were expelled, would remove the difficulties. In this case it would have to be admitted that no example of the true gold Demareteion has yet been found; but there are other instances of coins which are known to have existed, though none have survived; the unique gold coin of Messana (*c.* 460 BC) provides a near parallel in both date and place.

This silver decadrachm exerted a considerable influence upon the succeeding coinages of Syracuse (nos 81, 83, Pl. 28), many of which are distinguished by the presence of a sea-monster in the obverse exergue (nos 83, 85, Pls 28, 29). It has often been supposed that this is an allusion to the sea-power of Syracuse exhibited at the battle of Cumae in 474 BC, when the Etruscans were defeated; but, even though this interpretation may yield an approximately correct date, proof that such variable symbols conceal historical allusions is lacking.

Throughout the fifth century the heads of Arethusa provide a series of detailed and carefully executed illustrations of the different ways in which a young lady could adorn and arrange her hair, and of different types of ear-ring and necklace. The greatest elaboration was attained in the last quarter of the century, when a number of artists began to sign their work (nos 97–103, Pls 32, 33; nos 107–124, Pls 37–45). To the same group were due other innovations which were to be widely copied, the galloping quadriga and the facing head.

The climax of Syracusan coinage is reached in the decadrachm issues of Cimon (nos 116–121, Pls V and 40–43) and Euaenetus nos 104–106, Pls 34–36). The traditional view associates these coins with the Athenian defeat of 413 BC and holds that 'the arms in the exergue may be arms taken from the Athenians and offered as prizes ($\alpha\theta\lambda\alpha$) in the Assinarian games, which were established to commemorate the event'. (*HN*², pp. 176ff.). While it may be agreed that the arms are certainly 'prizes' (for they are so described on the coins), the connexion with the Athenian defeat is slender, for the Assinaria is known only as a sacrifice, and not as an agonistic festival. In fact, the decadrachms of Cimon, a small issue requiring only three obverse dies, are probably to be dated *c.* 405 BC, and may be connected with Dionysius' victory over the Carthaginians in that year; they certainly provided models for coins minted at Motya before that town was destroyed in 398 BC.

The decadrachms of the type of Euaenetus (many are not signed) required some twenty-four obverse dies, which must represent the coinage of a substantial period of time. Many of these have sometimes been thought to be earlier than the decadrachms of Cimon, and to have started in 422 BC, but such an early date is improbable. At this time innovations in design by the Syracusan master engravers were copied with little delay by other Greek cities and by the Carthaginians. Euaenetus' head of Arethusa became the most popular of all Syracusan models, being copied extensively not only on Siculo-Punic coinages (no. 196, Pl. 69; no. 206, Pl. 72), but also far outside Sicily (*e. g.* Locri Opuntii no. 465, Pl. 148); yet there is no sign of any such copy of this head until well into the fourth century. This fact is sufficient to exclude a date *c.* 420 BC for the start of these issues, which in reality constitute the coinage of the latter part of the reign of Dionysius I from *c.* 395–370 BC.

Apart from a possible issue in 479 BC (see above p. 288), the first Syracusan gold (no. 125, Pl. 46) may have been struck during the emergency of the Athenian siege in 413 BC; the reverse recalls that of the earliest Syracusan silver (nos 72, 73, Pl. 23), while the head of Heracles on the obverse (not previously encountered on Syracusan coinage) may indicate the temple which provided the bullion. In the early fourth century the output of gold was considerable, and some of the dies are still being signed by the late fifth century masters, Cimon and Euaenetus (nos 126–129, Pls VI, VII and 46). Towards the end of the century Syracuse, like Carthage, was employing electrum (nos 130, 131, Pls 46, 47).

In the fourth and third centuries Syracuse was the only surviving important Greek mint in Sicily. The issues of this period have been briefly commented upon in the general introduction to Sicily (above, p. 280f.).

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Plate 23

72 SYRACUSE, c. 510 BC Tetradrachm.
Obv. Quadriga with male driver; horses walking; ΣΥΡΑΡΟ-
 ΣΙΟΝ. *Rev.* Incuse square with head of Arethusa in central
 depression.
 Syracuse. Boehringer 12.

73 SYRACUSE, c. 510 BC Didrachm: 8.62 gm.
Obv. Horseman leading second horse; ΣΥΡΑΡΟΣΙΟΝ.
Rev. As no. 72.
 Priv. coll. Boehringer 32.

Plate 24

74 SYRACUSE, c. 500–490 BC Tetradrachm: 16.62 gm.
Obv. As no. 72, but above, Nike flies to crown driver;
 ΣΥΡΑ. *Rev.* Head of Arethusa with hair in fillet, ear-ring
 and necklace; around, four dolphins; ΣΥΡΑΡΟΣΙΟΝ.
 Munich. Boehringer 34.

75 SYRACUSE, c. 500–490 BC Tetradrachm: 17.08 gm.
Obv. As no. 74, but Nike hovers to crown horses; no legend.
Rev. As no. 74, but head in linear circle.
 London (BM); PCG, pl. 7, 30 Boehringer 46.

Plate 25

76 SYRACUSE, c. 485 BC Tetradrachm: 17.39 gm.
Obv. As no. 74, but Nike flies to crown horses. *Rev.* Head of
 Arethusa with necklace and hair looped over pearl band;
 around, four dolphins; ΣΥΡΑΚΟΣΙΟΝ.
 Hess/Leu 12. 4. 1962, 89. Boehringer 84.

77 SYRACUSE, c. 485 BC Didrachm: 8.32 gm.
Obv. Bearded horseman leading second horse (shown in
 silhouette only). *Rev.* As no. 76 but three dolphins.
 Hess/Leu 16. 4. 1957, 96. Boehringer 99.

Plate 26

78 SYRACUSE, 480–479 BC Decadrachm: 43.20 gm.
Obv. Quadriga; horses walking; above, Nike flies to crown
 one horse; in ex., lion. *Rev.* (not shown). Same die as no. 79.
 Paris; *Colln. de Luynes* 1143. Boehringer 374.
Note. Compare the similar type at Leontini, nos 18 and 19
 (Pl. 6).

Plate I (frontispiece)

79 SYRACUSE, 480–479 BC Decadrachm: 43.36 gm.
Obv. (not shown). Same die as no. 78. *Rev.* Head of Arethusa
 in linear circle; she wears olive wreath, fillet, ear-ring and
 necklace; around, four dolphins; ΣΥΡΑΚΟΣΙΟΝ.
 Berlin; Regling 403. Boehringer 374.

Plate 27

80 SYRACUSE, 480–479 BC Decadrachm: 44.42 gm.
Obv. (not shown). Same die as no. 78. *Rev.* As no. 79.
 London (BM); PCG, pl. 16, 54. Boehringer 376.
Note. Nos 78–80 are here given the traditional date of
 480–479 BC, See, however, the introductory paragraphs to
 Syracuse for a possible alternative view.

Plate 28

81 SYRACUSE, c. 470–460 BC Tetradrachm.
Obv. (not shown). As no 83. *Rev.* Head of Arethusa with ear-

ring, necklace and hair in pearl band; around, four dolphins; *ΣΥΠΑΚΟΣΙΟΝ*.

Munich. Boehringer 481.

82 SYRACUSE, c. 470–460 BC Litra.

Obv. Head of Arethusa wearing ear-ring and with hair in pearl band; *ΣΥΠΑ*. *Rev.* Octopus.

Priv. coll. Cf. Boehringer 450/451.

83 SYRACUSE, c. 470–460 BC Tetradrachm.

Obv. Quadriga; horses walking; above, Nike flies to crown horses; in ex., sea monster. *Rev.* As no. 81.

Pennisi. Boehringer 483.

Plate 29

84 SYRACUSE, c. 460 BC Tetradrachm: 17.22 gm.

Obv. (not shown). Die of no. 85. *Rev.* As no. 81.

Priv. coll. Boehringer 520.

85 SYRACUSE, c. 460 BC Tetradrachm: 17.46 gm.

As no. 83.

Priv. coll. Boehringer 519.

86 SYRACUSE, c. 460 BC Tetradrachm.

Obv. (not shown). As no. 83. *Rev.* As no. 81.

Priv. coll. Boehringer 515.

87 SYRACUSE, c. 460 BC Tetradrachm: 17.40 gm.

Obv. (not shown). As no. 83. *Rev.* As no. 81, but hair in broad band.

London (BM); PCG, pl. 16, 56. Boehringer 536.

88 SYRACUSE, c. 460 BC Tetradrachm: 17.33 gm.

Obv. (not shown). As no. 83. *Rev.* As no. 81, but hair bound in triple fillet; necklace has acorn (?) pendant.

London (BM). Boehringer 570.

Plate 30

89 SYRACUSE, c. 450 BC Tetradrachm: 17.24 gm.

Obv. (not shown). As no. 83. *Rev.* As no. 81, but fillet passing twice round hair and tied at back head; pearl ornamented necklace.

Priv. coll. Boehringer 596.

90 SYRACUSE, c. 450 BC Tetradrachm.

Obv. (not shown). Quadriga; horses galloping; above, Nike flies to crown driver; in ex., sea monster. *Rev.* As no. 89, but hair gathered on crown of head.

Pennisi. Boehringer 604.

91 SYRACUSE, c. 450 BC Tetradrachm: 17.21 gm.

Obv. (not shown). As no. 83. *Rev.* As no. 87.

Priv. coll. Boehringer 630.

92 SYRACUSE, c. 440 BC Tetradrachm: 17.22 gm.

Obv. (not shown). As no. 93, but no sea monster in ex.

Rev. Head of Arethusa with hair confined with a broad metal band (ampyx) ornamented with olive leaves, over which is worn a cap (sakkos) embroidered with a maeander pattern; around, four dolphins; *ΣΥΠΑΚΟΣΙΟΝ*.

Pennisi. Boehringer 645.

93 SYRACUSE, c. 440 BC Tetradrachm: 16.97 gm.

Obv. As no. 83, but no sea monster in ex. *Rev.* As no. 89, but fillet passes four times round head.

Priv. coll. Boehringer 670.

Plate 31

94 SYRACUSE, c. 430 BC Tetradrachm: 17.33 gm.

Obv. (not shown). As no. 93, but Nike flies to crown driver. *Rev.* As no. 92, but hair in scarf wound round head.

Berlin; Regling 575. Boehringer 723.

95 SYRACUSE, c. 430 BC Tetradrachm: 17.30 gm.

Obv. (not shown). As no. 93, but cicada in ex. *Rev.* As no. 92, but hair in net, and band ornamented with maeander pattern on brow.

Paris; *Colln. de Luynes* 1188. Boehringer 726.

96 SYRACUSE, c. 425 BC Tetradrachm: 17.15 gm.

Obv. (not shown). Same die as no. 95. *Rev.* As no. 93.

Berlin; Regling 578. Boehringer 728.

Plate 32

97 SYRACUSE, c. 425–413 BC Tetradrachm: 17.28 gm.

Obv. Quadriga, horses galloping; above, Nike flies to crown female driver. *Rev.* Head of Arethusa, wearing ear-ring, necklace and ampyx inscribed over brow *ΣΩΣΙΟΝ* (artist's signature); hair rolled on neck; around, four dolphins; *ΣΥΠΑΚΟΣΙΟΝ*.

Munich. Tudeer 2.

Note. For the quadriga compare Camarina no. 147 (Pl. 52).

98 SYRACUSE, c. 425–413 BC Tetradrachm: 17.36 gm.

Obv. (not shown). As no. 97. *Rev.* As no. 97, but no ampyx; below neck, *EYMHNOY* (artist's signature).

Priv. coll. Tudeer 19.

99 SYRACUSE, c. 425–413 BC Tetradrachm.

Obv. (not shown). Same die as no. 100. *Rev.* As no. 98, but to l., artist's signature (*EYKAEIAA*) on folding tablet fitted with loop for suspension.

Priv. coll. Tudeer 24.

100 SYRACUSE, c. 425–413 BC Tetradrachm: 17.40 gm.

Obv. As no. 97, but in ex., *EYMHNOY* (artist's signature). *Rev.* As no. 98.

Berlin. Tudeer 22.

Plate 33

101 SYRACUSE, c. 415 BC Tetradrachm: 17.29 gm.

Obv. Quadriga, horses galloping; the rein of the farthest

horse has broken and is trailing below the forelegs; above, Nike flies to crown male bearded driver and carries tablet inscribed *EYAINETO* (artist's signature); in ex., two dolphins. *Rev.* Head of Arethusa with hair in sphendone embroidered with stars and tied over brow; she also wears ampyx ornamented with dolphin leaping over waves; around, four dolphins; *ΣΥΠΑΚΟΣΙΩΝ*.

London (BM); *PCG*, pl. 17, 64. Tudeer 42.

Note. For broken rein on obv. compare Acragas no. 177 (pl. 61).

102 SYRACUSE, c. 415 BC Tetradrachm.

Obv. (not shown). Same die as no. 101. *Rev.* As no. 101, but ampyx ornamented with star, and *EYMENOY* (artist's signature) below neck.

Pennisi. Tudeer 44.

103 SYRACUSE, c. 413 BC Tetradrachm: 17.10 gm.

Obv. (not shown). Same die as no. 107. *Rev.* Head of Arethusa wearing wreath of barley-ears and poppy-head; necklace with lion's head pendant; below neck, *EYM* (artist's signature); around, four dolphins; *ΣΥΠΑΚΟΣΙΩΝ*.

London (BM). Tudeer 46.

Plate 34

104 SYRACUSE, c. 395–380 BC Decadrachm: 42.85 gm.

Obv. Quadriga, horses galloping; above, Nike flies to crown female driver; in ex., a step on which a shield (l.) and crested helmet (r.), with cuirass between two greaves in front. *Rev.* Head of Arethusa with reed in hair, wearing necklace and ear-ring with triple pendant; around, four dolphins; below, *EY]AINE(TOY)* (artist's signature); *ΣΥΠΑΚΟΣΙΩΝ*. Paris; *Colln. de Luynes* 1248. Gallatin CII/RIII.

Plate 35

105 SYRACUSE, c. 395–380 BC Decadrachm: 42.85 gm.

Obv. (not shown). Same die as no. 104. *Rev.* As no. 104.

Pennisi. Gallatin CVI/RIII.

Plate 36

106. SYRACUSE, c. 395–380 BC Decadrachm: 43.19 gm.

Obv. (not shown). As no. 104. *Rev.* As no. 104, but to l., Δ (? = *δεκάδραχμον*).

Priv. coll. Gallatin RIX/DII.

Plate 37

107 SYRACUSE, c. 412 BC Tetradrachm: 17.07 gm.

Obv. Quadriga, horses galloping; above, Nike carrying palm-branch in l. hand, flies to crown winged male driver with r.; in ex., Scylla, with female body, serpent tail and foreparts of two hounds, carries trident over left shoulder; to l. of her, a dolphin, to r., a fish and *EYΘ* (artist's signature). *Rev.* Head of Arethusa wearing in hair ear of barley, ivy leaf and poppy head; her necklace appears to terminate in a small vase; around, four dolphins; below, *ΦΡΥΓΙΑΛΙΟΣ* (artist's signature); *ΣΥΠΑΚΟΣΙΩΝ*.

Berlin. Tudeer 47.

Note. For the treatment of the horses compare the last tetradrachm of Selinus before its destruction in 409 BC (no. 191, Pl. 68); for Scylla compare Acragas no. 175 (Pl. 60).

Plate 38

108 SYRACUSE, c. 412–400 BC Tetradrachm.

Obv. Head of Arethusa wearing star-embroidered sphendone, and ampyx inscribed *ΦΡΥ* (= *Φρυγίλλος*, cf. no. 107); around, four dolphins; *ΣΥΠΑΚΟΣΙΩΝ*. *Rev.* Quadriga, horses galloping; above, Nike flies to crown female driver who brandishes lighted torch; on ground-line to l., *EYAPXIAA* (artist's signature); in ex., ear of barley.

Pennisi. Tudeer 55.

109 SYRACUSE, c. 412–400 BC Tetradrachm: 17.09 gm.

Obv. (not shown). Same die as no. 108. *Rev.* As no. 108, but without artist's signature.

Berlin. Tudeer 56.

110. SYRACUSE, c. 412–400 BC Tetradrachm.

Obv. (not shown). As no. 109. *Rev.* Head of Arethusa, wearing sphendone (embroidered with stars) knotted on forehead, and ampyx; ear-ring has five pendants; around, four dolphins, one of which dives from behind base of neck; on l. lower dolphin, *EYKAEIAA* (artist's signature); *ΣΥΠΑΚΟΣΙΩΣ*.

Pennisi. Tudeer 57.

Plate IV

111 SYRACUSE, c. 412–400 BC Tetradrachm: 17.21 gm.

Obv. (not shown). As no. 109 rev. *Rev.* Head of Athena facing wearing necklace of pendants and crested helmet with cheek-pieces raised; the vizor and the bowl are decorated with floral motifs; on the bowl, *EYKAEIAA* (artist's signature); around, four dolphins; *ΣΥΠΑΚΟΣΙΩΝ*.

London (BM); *PCG*, pl. 17, 69. Tudeer 58.

Plate 39

112 SYRACUSE, c. 412–400 BC Tetradrachm.

Obv. (not shown). Same die as no. 111. *Rev.* As no. 111, but *ΣΥΠΑΚΟΣΙΩΣ* and signature *EYKAEIA*; a break in the die disfigures the chin.

Pennisi. Tudeer 59.

113 SYRACUSE, c. 412–400 BC Tetradrachm: 17.14 gm.

Obv. Quadriga, horses galloping; above, Nike flies to crown driver; in ex., lion attacking bull. *Rev.* Head of Arethusa; below, three dolphins; to r., *IM* or *MI* (artist's signature); *ΣΥΠΑΚΟΣΙΩΝ* (retrograde).

London (BM). Tudeer 67.

114 SYRACUSE, c. 412–400 BC Tetradrachm: 17.00 gm.

Obv. (not shown). As no. 113. *Rev.* Head of Arethusa with stalk of barley in hair; around, four dolphins; *ΣΥΠΑΚΟΣΙΩΝ*. London (BM); *PCG*, pl. 17, 71. Tudeer 66.

115 SYRACUSE, c. 412–400 BC Tetradrachm.

Obv. Quadriga, horses galloping; above, Nike flies to crown driver; in ex., stalk of barley. *Rev.* Head of Arethusa wearing star-embroidered sphendone, ampyx and necklace with pendants; around, four dolphins; ΣΥΡΑΚΟΣΙΩΝ.
Priv. coll. Tudeer 65.

Plate 40

116 SYRACUSE, c. 405 BC Decadrachm.

Obv. Quadriga, horses galloping; above, Nike flies to crown female driver; in ex; step, on which shield (l.) and crested helmet (r.); in front, cuirass between two greaves; below cuirass, ΑΘΛΑ ('prizes'). *Rev.* (not shown). Same die as no. 117. Pennisi. Jongkees A/α.

Plate 41

117 SYRACUSE, c. 405 BC Decadrachm: 43.32 gm.

Obv. (not shown). Same die as no. 116. *Rev.* Head of Arethusa with hair tied on forehead, and ampyx inscribed KIM (Cimon, artist's signature); she wears necklace and pendent ear-ring; around, four dolphins, one of which swims from behind base of neck; ΣΥΡΑΚΟΣΙΩΝ.

Paris; Colln. de Luynes 1244. Jongkees A/α.

Plate 42

118 SYRACUSE, c. 405 BC Decadrachm: 40.51 gm.

Obv. (not shown). Same die as no. 116. *Rev.* As no. 117, but on ampyx, K, and on dolphin below neck, KΙΜΩΝ (artist's signature).

London (BM). Jongkees A/γ.

Plate V

119 SYRACUSE, c. 405 BC Decadrachm: 42.86 gm.

Obv. (not shown). Same die as no. 116. *Rev.* As no. 118, but no signature on ampyx.

Priv. coll. Jongkees A/δ.

Plate 43

120 SYRACUSE, c. 405 BC Decadrachm: 43.22 gm.

Obv. (not shown). Same die as no. 116. *Rev.* As no. 119.

Paris; Colln. de Luynes 1242. Jongkees A/β.

121 SYRACUSE, c. 405 BC Decadrachm.

Obv. (not shown). Same die as no. 116. *Rev.* As no. 117, but on ampyx KΙ only.

Pennisi. Jongkees A/ζ.

Plate 44

122 SYRACUSE, c. 412–400 BC Tetradrachm.

Obv. Head of Arethusa facing, wearing ear-ring, necklace with pendants and ampyx inscribed KΙΜΩΝ (artist's signature); around, four dolphins (the head of the fourth emerges from behind the left corner of Arethusa's neck); above, outside circle, ΑΡΕΘΟΩΣΑ. *Rev.* Quadriga, horses galloping; above, Nike flies to crown female driver; on double ex. line, KΙΜΩΝ (artist's signature); in ex., ear of barley and ΣΥΡΑΚΟΣΙΩΝ.

Pennisi. Tudeer 78.

Plate 45

123 SYRACUSE, c. 412–400 BC Tetradrachm: 17.26 gm.

Obv. As no. 122, but one dolphin emerges from behind neck on r., another is half hidden by the hair on the left. *Rev.* Quadriga, horses galloping; below forelegs, fallen turning post; above, Nike, apparently standing on the heads of the two nearest horses, approaches to crown driver, who turns head back; in ex., stalk of barley; ΣΥΡΑΚΟΣΙΩΝ.

London (BM); PCG, pl. 17, 68. Tudeer 81.

124 SYRACUSE, c. 400 BC Tetradrachm: 16.85 gm.

Obv. Quadriga, horses galloping; above, Nike flies to crown driver; in ex., dolphin. *Rev.* Head of Arethusa, wearing ear-ring and necklace, hair confined in broad band and drawn up onto crown of head; around, four dolphins; below neck, [ΕΥΚΛΕΙ] (artist's signature); ΣΥΡΑΚΟΣΙΩΝ.

Priv. coll. Tudeer 88.

Plate 46

125 SYRACUSE, c. 414 BC Gold 20-litra piece.

Obv. Head young Heracles wearing lion-skin; ΣΥΡΑ. *Rev.* Incuse square with head of Arethusa in central depression; ΣΥΡΑ.

Priv. coll.

Note. The reverse is a revival of the reverses of the earliest coinage of Syracuse: cf. nos 72 and 73 (Pl. 23).

126 SYRACUSE, c. 390–380 BC Gold 50-litra piece.

Obv. Head of young male deity; to r., Ε (? = Euaenetus, artist's signature); ΣΥΡΑ. *Rev.* Horse galloping; above, star; on band below, ΣΥΡΑΚΟΣΙΩΝ.

Pennisi.

127 SYRACUSE, c. 390–380 BC Gold 100-litra piece.

Obv. Head of Arethusa wearing necklace and pendent ear-ring; hair in star-embroidered sphendone; to r., ΕΥΑΙΝΕ (artist's signature); ΣΥΡΑΚΟΣΙΩΝ. *Rev.* Heracles, kneeling on rocky ground, wrestles with lion.

Syracuse (from Avola Hoard, 1914).

128 SYRACUSE, c. 390–380 BC Gold 100-litra piece.

Obv. and *rev.* (not shown) as no 127.

Priv. coll.

Plates VI/VII

129 SYRACUSE, c. 390–380 BC Gold 100-litra piece: 5.80 gm.

Obv. As no. 127, but ΕΥΑΙ and ΣΥΡΑΚΟΣΙΩΝ. *Rev.* As no. 127.

Berlin.

Plate 46

130 SYRACUSE, c. 300 BC El., 100-litra piece: 6.55 gm.

Obv. Head of Apollo wearing laurel wreath; to r., lyre; ΣΥΡΑΚΟΣΙΩΝ. *Rev.* Head of Artemis wearing ampyx, pendent ear-ring and necklace, with quiver over right shoulder; to l., lyre; on r., ΣΩΤΕΙΡΑ ('saviour').

Paris; Colln. de Luynes 1261.

Plate 47

131 SYRACUSE, c. 300 BC El., 50-litra piece; 3.56 gm.
Obv. Head of Apollo wearing laurel wreath; to r., horse's head. *Rev.* Tripod; ΣΥΡΑΚΟΣΙΩΝ.
 Paris; *Colln. de Luynes* 1268.
Note. Nos 130, 131 have usually been attributed to the reign of Dion, 357–354 BC, but apart from the difficulty of accommodating such large and varied issues in so short a reign other evidence tends to show that they are of a later date.

132 SYRACUSE, c. 310 BC Stater: 8.48 gm.
Obv. Head of Athena wearing crested Corinthian helmet with running griffin on bowl. *Rev.* Pegasus flying; below, triskeles; ΣΥΡΑΚΟΣΙΩΝ.
 Priv. coll.

133 SYRACUSE, c. 340 BC Gold 30-litra piece.
Obv. Head of Zeus Eleutherios wearing laurel wreath; ΖΕΥΣ ΕΛΕΥΘΕΡΙΟΣ (= 'Zeus the Deliverer'). *Rev.* Pegasus flying; to l., Α; below, three pellets; ΣΥΡΑΚΟΣΙΩΝ. Syracuse.
Note. The three pellets mark this as a 3-unit piece; the units in question are the silver Corinthian-type staters similar to, though somewhat earlier than, no. 132; each of these was equivalent to 10 Sicilian litrae. The ratio of gold to silver was thus 1:12.

Plate 48

134 SYRACUSE, Agathocles, 317–289 BC
 Tetradrachm: 17.22 gm.
Obv. Head of Arethusa wearing ear-ring and necklace, with reed in hair; around, three dolphins; in ex., ΝΙ. *Rev.* Quadriga, horses galloping, female driver; above, triskeles; in ex., ΑΙ; ΣΥΡΑΚΟΣΙΩΝ.
 Hess/Leu 7. 4. 1960, 96.
Note. This type belongs to the earlier part of Agathocles' reign, 317–c. 305 BC.

135 SYRACUSE, Agathocles, 317–289 BC Tetradrachm.
Obv. Head of Persephone with stalks of barley in hair, wearing ear-ring and necklace; to l., ΚΟΡΑΣ (= 'Maiden', title of Persephone). *Rev.* (not shown). As no. 137.
 Priv. coll.

136 SYRACUSE, Agathocles, 317–289 BC
 Tetradrachm: 16.61 gm.
Obv. As no. 135. *Rev.* (not shown). As no. 137.
 London (BM).

137 SYRACUSE, Agathocles, 317–289 BC Tetradrachm.
Obv. (not shown). As no. 135. *Rev.* Nike, draped below waist, fixes arms on trophy, holding nail in l. hand and hammer in r.; to l., triskeles; to r., ΑΙ, ΑΓΑΘΟΚΛΕΟΣ.
 Priv. coll.
Note. Nos 135–137 belong to the later part of Agathocles' reign, c. 305–289 BC.

Plate 49

138 SYRACUSE, Hicetas, 288–279 BC Gold drachma.
Obv. Head of Persephone wearing ear-ring and necklace, with stalk of barley in hair; to r., stalk of barley; ΣΥΡΑΚΟΣΙΩΝ. *Rev.* Nike driving biga; above, star; ΕΠΙ ΙΚΕΤΑ.
 Syracuse.

139 SYRACUSE, Hieron II, 275–215 BC
 Gold drachma: 4.26 gm.
Obv. Head of Persephone as nos 135 and 136; to r., poppy-head. *Rev.* Female driver in biga; ΙΕΡΩΝΟΣ.
 Hess/Leu 16. 4. 1957, 126.

140 SYRACUSE, Philistis, wife of Hieron II, 275–215 BC
 16-litra piece.
Obv. Head of Philistis wearing diadem and veil; to r., stalk of barley. *Rev.* (not shown). Nike driving quadriga; ΒΑΣΙΛΙΣΣΑΣ ΦΙΛΙΣΤΙΑΟΣ
 Priv. coll.

141 SYRACUSE, Philistis, wife of Hieron II, 275–215 BC
 16-litra piece.
Obv. and *rev.* (not shown) as no. 140.
 Priv. coll.
Note to nos 140, 141. Minted c. 269–241 BC. For similar and contemporary veiled heads of royal ladies, see nos 803 and 805 (Pl. 219).

Plate 50

142 SYRACUSE, Hieron II, 275–215 BC
 32-litra piece: 27.76 gm.
Obv. Head of Hiero wearing diadem; to r., star; below, Φ.
Rev. Nike driving quadriga; above, star; below, Κ;
 ΒΑΣΙΛΕΟΣ ΙΕΡΩΝΟΣ.
 London (BM); *PCG*, pl. 38, 21.
Note. Minted c. 269–265 BC.

Plate 51

143 SYRACUSE, Gelon II, 241–216 BC 8-litra piece.
Obv. Head of Gelon, wearing diadem; to r., stalk of barley.
Rev. Nike driving biga; to r., Κ; above, ΒΑ; above and below, ΣΥΡΑΚΟΣΙΟΙ ΓΕΛΩΝΟΣ.
 Priv. coll.
Note. Struck under Hieron II, c. 234–230 BC.

144 SYRACUSE, Hieronymus, 215–214 BC
 24-litra piece: 20.32 gm.
Obv. Head of Hieronymus wearing diadem; to r., cornucopiae. *Rev.* Winged thunderbolt; above, ΜΙ; ΒΑΣΙΛΕΟΣ ΙΕΡΩΝΥΜΟΥ.
 London (BM); *PCG*, pl. 38, 23.

145 SYRACUSE, 214–212 BC 16-litra piece: 13.60 gm.
Obv. Head of Zeus wearing laurel wreath. *Rev.* Nike driving quadriga; below, ΣΑ; in ex., ΥΑ; ΣΥΡΑΚΟΣΙΩΝ.
 Paris; *Colln. de Luynes* 1391.

CAMARINA

Founded originally as a colony of Syracuse c. 598 BC, Camarina was refounded by Hippocrates of Gela, c. 492. About eight years later Gelon removed the population to swell that of his new capital of Syracuse; thereafter the site seems to have remained unoccupied until Camarina was again refounded from Gela in 461 BC. For the rest of the century it enjoyed a prosperous but less eventful life, until its population was removed to Syracuse in 405 BC.

Always a minor mint, most of its coinage falls in two widely separated periods. An isolated didrachm (no. 146, Pl. 52) belongs to the short-lived foundation of Hippocrates; the remainder is confined to the last quarter of the century. In this phase Syracusan influence is strong, and one die (no. 151 obv., Pl. 54) is signed by Euaenetus, who worked also at Syracuse and Catana; the other signatures *EXE*- (?Echecrates, no. 148, Pl. 53) and *Exacestidas* (nos 150 and 152, Pl. 54) are known at Camarina only.

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Plate 52

146 CAMARINA, c. 490–484 BC Didrachm.

Obv. Circular shield with Corinthian helmet embossed as emblem. *Rev.* Palm-tree between two greaves; *KAMAPI*. Florence.

Note. It is possible that the obverse type is a punning allusion to the city's name, since *καμάρια* means something with an arched top.

147 CAMARINA, c. 420 BC Tetradrachm: 17.02 gm.

Obv. Athena wearing crested helmet drives galloping quadriga; above, Nike flies to crown her; in ex., swan in flight. *Rev.* Head of bearded Heracles wearing lion scalp; *KAMAPINAION* retro-grade.

Hess/Leu 16. 4. 1957, 66.

Note. For the obverse compare Syracuse no. 97 (Pl. 32).

Plate 53

148 CAMARINA, c. 415–405 BC Tetradrachm.

Obv. Athena driving galloping quadriga; above, Nike flies to crown her; in ex., fallen Ionic column (the turning post) and *EXE* (artist's signature). *Rev.* Head of bearded Heracles wearing lion's scalp; *KAMAPINAION*.

Priv. coll.

149 CAMARINA, c. 415–405 BC Tetradrachm.

Obv. As no. 148, but in ex., corn grain (off flan). *Rev.* As no. 148, but Heracles beardless.

Priv. coll.

Plate 54

150 CAMARINA, c. 410 BC Didrachm: 8.29 gm.

Obv. Head of young horned river-god, wearing diadem; below neck; *EEAKE* retrograde (= Exacestidas, artist's signature); *KAMAPINAION*. *Rev.* Nymph Camarina, using her veil as a sail, reclines on back of swan flying over waves.

Priv. coll.

151 CAMARINA, c. 410 BC Didrachm: 8.32 gm.

Obv. Facing head of young river-god, horned; l. and r., a fish; around, wave pattern; on neck, *EYAI* (= Euaenetus, artist's signature). *Rev.* As no. 150, but to r. a fish; *KAMAPINA*.

Berlin; Regling 540.

152 CAMARINA, c. 415–405 BC Tetradrachm: 17.08 gm.

Obv. As no. 148, but on ex. line *EEAKEΣΤΙΔΑΣ* (artist's signature); in ex., two amphorae. *Rev.* (not shown). As no. 149.

Priv. coll.

153 CAMARINA, c. 410 BC Gold 20-litra piece: 1.17 gm.

Obv. Head of Athena wearing crested Attic helmet; on bowl, hippocamp. *Rev.* Sprig of olive with two berries; *KA*. London (BM); *PCG*, pl. 14, 27.

Note. The abbreviated legend could apply to either Camarina or Catana, but the Athena head is more appropriate to the former.

GELA

Cretans and Rhodians jointly founded Gela in 688 BC; its greatest period was under the dynasty of tyrants who ruled there from the last years of the sixth century, until Gelon removed part of the population to Syracuse c. 485 BC; thereafter Gela remained, after Syracuse, one of the most important mints in Sicily. The earliest coinage of didrachms will have started under Hippocrates soon after 500 BC (nos 155, 156, Pl. 55), but after Gelon had moved his capital to Syracuse, tetradrachms became the rule, and the Syracusan quadriga was adopted as the obverse type (*cf.* no. 157 obv., Pl. 56, with no. 76 obv., Pl. 25). The reverses

of both tetradrachms and didrachms are normally occupied by the god of the local river, from which the city took its name; in one case the river-god is being crowned by a nymph or goddess described as 'saviour of the city', but the occasion is unknown (no. 159, Pl. 56). In the last quarter of the century the river-god is sometimes shown as a young man surrounded by the fish, which his water supports (nos 164–166, Pl. 58); a similar transformation has been noted at Catana (above, p. 284). At Gela, as elsewhere, the same period saw the introduction of the galloping quadriga (no. 163, obv. not shown, Pl. 57). Here, too, as at Syracuse, Acragas and Camarina, there are some rare issues in gold (no. 167, Pl. 58).

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Plate 55

154 GELA, c. 480 BC Tetradrachm: 17.37 gm.
Obv. Naked bearded horseman, wearing conical helmet and brandishing spear. *Rev.* River-god Gelas as a bull with bearded human face; ΓΕΛΑΣ.
London (BM); *PCG*², pl. 52, 30; *SNG* II, 951. Jenkins 101.

155 GELA, c. 495–480 BC Didrachm: 8.51 gm.
Obv. As no. 154, but no helmet. *Rev.* As no. 154, but forepart only.
Priv. coll. Jenkins 8.

156 GELA, c. 495–480 BC Didrachm: 8.72 gm.
Obv. As no. 154, horseman wears Attic helmet with high detached crest. *Rev.* As no. 155.
Priv. coll. Jenkins 28.

Plate 56

157 GELA, c. 470 BC Tetradrachm: 17.33 gm.
Obv. Quadriga with female driver, horses walking; above, Nike flies to crown horses. *Rev.* As no. 155.
Priv. coll. Jenkins 170.

158 GELA, c. 460 BC Tetradrachm: 17.56 gm.
Obv. As no. 157, but in ex., palmette and volutes. *Rev.* As no. 155.
Brussels; *Colln. Hirsch* 401. Jenkins 341.

159 GELA, c. 450 BC Tetradrachm: 17.11 gm.
Obv. As no. 157, but in ex., ΓΕΛΟΙΟΝ retrograde. *Rev.* Nymph crowning forepart of river-god Gelas; ΣΟΣΗΘΙΑΙΣ retrograde (= 'Saviour of the city').
Brussels; *Colln. Hirsch* 402. Jenkins 371.

Plate 56

160 GELA, c. 420 BC Tetradrachm.
Obv. (not shown). As no. 157, but Nike crowns driver; in ex., bird in flight. *Rev.* As no. 155.
Pennisi. Jenkins 475.

161 GELA, c. 420 BC Tetradrachm.
Obv. (not shown). As no. 157. *Rev.* As no. 155.
Priv. coll. Jenkins 473.

162 GELA, c. 420 BC Tetradrachm: 17.18 gm.
Obv. (not shown). As no. 157. *Rev.* As no. 155.
Priv. coll. Jenkins 471.

163 GELA, c. 410 BC Tetradrachm.
Obv. (not shown). Quadriga, horses galloping; above, eagle in flight; in ex., ear of barley. *Rev.* River-god Gelas as bull with bearded human face; to l., two barley plants; in ex., grain of barley; ΓΕΛΑΣ.
Priv. coll. Jenkins 485.

Plate 58

164 GELA, c. 420 BC Tetradrachm: 17.43 gm.
Obv. Nike driving quadriga, horses walking; above, olive wreath; in ex., ΓΕΛΟΙΟΝ. *Rev.* Head of young horned river-god Gelas wearing diadem; around, three fish, of which that on l. is shown from below.
Brussels; *Colln. Hirsch* 403. Jenkins 456.

165 GELA, c. 420 BC Tetradrachm: 17.15 gm.
Obv. (not shown). As no. 164. *Rev.* As no. 164.
London (BM); *PCG*, pl. 15, 37. Jenkins 455.

166 GELA, c. 420 BC Tetradrachm.
Obv. (not shown). As no. 164. *Rev.* As no. 164.
Munich. Jenkins 454.

167 GELA, c. 405 BC Gold 30-litra piece: 1.75 gm.
Obv. Young horseman wearing Phrygian helmet and carrying spear. *Rev.* Forepart of river-god Gelas, as above; above, barley grain; ΓΕΛΑΣ.
London (BM); *PCG*, pl. 15, 36. Jenkins 490.

ACRAGAS

Founded comparatively late (580 BC), Acragas soon surpassed her mother-city, Gela, and quickly became one of the most splendid of the Sicilian cities. The highest point was probably reached under the tyrant Theron, 488–472 BC, when the territory of Acragas extended to the north coast at Himera (see above, p. 287); Theron acted in close co-operation with the Syracusan tyrants, and married his daughter, Demarete, to Gelon. After Theron's death, though control of Himera was lost, Acragas continued in great prosperity (partly based on the export of agricultural produce) until destroyed in the Carthaginian invasion of 406 BC. The distinctive types of Acragas are the eagle and the crab. The former is the bird of Zeus, in whose honour Theron began an enormous temple, parts of which still survive; the late fifth century coins show superb representations of eagles devouring their prey. The crab is no doubt a denizen of the local river or sea shore; on the quadriga types at the end of the fifth century it becomes no more than a symbol, and is sometimes omitted altogether.

The coinage of Acragas may go back to about 520 BC; from the beginning the didrachms had a type on each face (no. 168, Pl. 59), and the thin, spread flans are reminiscent of those of Selinus (no. 185, Pl. 66). Early in the fifth century the flans contracted and became thicker (no. 169, Pl. 59), and, perhaps already within the reign of Theron, tetradrachms were added. On both tetradrachms and didrachms varying symbols are introduced beneath the crab (no. 172, Pl. 59), the shell of which is sometimes made to resemble a grotesque human face (no. 171, Pl. 59; cf. no. 183, Pl. 65).

In the last quarter of the fifth century the rather staid, traditional types were transformed. The hitherto static eagle is now seen tearing at a dead hare or other victim, and is usually accompanied by its mate (nos 173ff., Pls 60–65); the crab, at first partially displaced by a fish or Scylla (nos 174, 175, Pl. 60), is soon reduced to a symbol, and replaced by a galloping quadriga (nos 176ff., Pls 61ff.). The most splendid version is to be found on the decadrachms (no. 179, Pls. 62, 63), to which no occasion can be assigned unless it be the victory of the Acragantine Exaenetus in the Olympic games of 412 BC. This brilliant phase of Acragantine coinage was cut short by the Carthaginian destruction of 406 BC, by which time Acragas had also produced an extensive and complex bronze coinage, which had no close parallel at the time elsewhere.

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Plate 59

168 ACRAGAS, c. 520–500 BC Didrachm: 8.74 gm.
Obv. (not shown). Eagle; *AKPATANTOΣ*. *Rev.* Crab.
Priv. coll.

169 ACRAGAS, c. 480 BC Didrachm: 8.80 gm.
Obv. Eagle; *AKPA*. *Rev.* Crab.
Priv. coll.

170 ACRAGAS, c. 460–420 BC Tetradrachm: 17.89 gm.
Obv. Eagle; *AKPATANTOΣ*. *Rev.* Crab.
Priv. coll.

171 ACRAGAS, c. 460–420 BC Tetradrachm: 17.37 gm.
Obv. (not shown). As no. 170. *Rev.* Crab; shell made to resemble human face.
Priv. coll.
Note. For treatment of the crab's shell compare no. 183 (Pl. 65).

172 ACRAGAS, c. 460–420 BC Tetradrachm: 17.41 gm.
Obv. (not shown). As no. 170, but eagle stands on abacus of Ionic capital. *Rev.* Crab; below, double floral spiral.
London (BM); *PCG*, pl. 14, 25.

Plate 60

173 ACRAGAS, c. 420–415 BC Tetradrachm: 16.95 gm.
Obv. Eagle with wings spread devouring dead hare; below, cockle-shell; *AKPATANTINON*. *Rev.* (not shown). Crab and fish (*polyprum cernium*); on l., cockle; on r., sea-snail.
Priv. coll.

174 ACRAGAS, c. 420–415 BC Tetradrachm.
Obv. (not shown). As no. 173. *Rev.* As no. 173, but no sea-snail.
Priv. coll.

175 ACRAGAS, c. 420–415 BC Tetradrachm.
Obv. Two eagles standing upon dead hare; *AKPAT*. *Rev.* Crab and Scylla with female body, serpent tail and foreparts of two hounds; *AKPATANTINON*.
Priv. coll.

Plate 61

176 ACRAGAS, c. 413–411 BC Tetradrachm: 17.11 gm.
Obv. Quadriga, horses galloping; above, Nike flies to crown female driver; in ex., crab. *Rev.* As no. 175 (*obv.*), but a plant growing in ground beneath hare; on wing of nearer eagle, *ΠΟΛΥ* (artist's signature).
London (BM); *SNG II*, 819. Seltman, *NC* 1948, p. 3, no. 4.

177 ACRAGAS, c. 413–411 BC Tetradrachm: 17.32 gm.
Obv. As no. 176, but below forelegs broken rein and *MYP* (artist's signature); in ex., Scylla. *Rev.* As no. 176, but no signature on wing and no plant on ground; to l., fly; *AKPATANTINON*.
 London (BM); SNG II, 820. Seltman, NC 1948, p. 2, no. 2.
Note. For broken rein on *obv.* cf. Syracuse no. 101 (Pl. 33).

178 ACRAGAS, c. 413–411 BC Tetradrachm: 16.77 gm.
Obv. As no. 176, but crab downwards. *Rev.* As no. 176; *AKPATANTINON* retrograde.
 Berlin; Regling 535. Seltman, NC 1948, p. 3, no. 6.

Plate 62

179 ACRAGAS, c. 412–411 BC Decadrachm: 43.22 gm.
Obv. Quadriga with young male driver, naked except for scarf; above, eagle flying carrying snake; below, crab downwards; *AKPATAS*.

Plate 63

Rev. As no. 177, but on r., cicada.
 Munich. Seltman, NC 1948, p. 3, no. 7.
Note. On the obverse the turning movement of the quadriga and the absence of ground-line suggests that this may be the sun-god, Helios, driving through the sky.

Plate 64

180 ACRAGAS, c. 409–408 BC Tetradrachm.
Obv. Quadriga, horses galloping, driven by Nike; above,

vine branch with leaf and grapes; in ex., *AKPATANTINON*.
Rev. As no. 179, but on r., young horned male head (river-god?), and above, *ΣTPATΩN* (magistrate's name).
 Priv. coll. Seltman, NC 1948, p. 4, no. 12.
Note. For another issue of Straton see no. 182 (Pl. 65).

181 ACRAGAS, c. 408–407 BC Tetradrachm: 17.40 gm.
Obv. As no. 180, but broken rein under forelegs; above, a tablet inscribed *AKPATANTINON* hangs on nail, and in ex., club. *Rev.* As no. 180, but no magistrate's name, and to l., lion's head.
 Paris; *Colln. de Luynes* 858. Seltman, NC 1948, p. 4, no. 14.
Note. On the obverse the die-cutter has miscalculated the space on the tablet, and has had to cut the two final letters outside on the left.

Plate 65

182 ACRAGAS, c. 413–406 BC Didrachm.
Obv. Eagle attacking snake; above, *ΣTPATΩN* (magistrate's name, cf. no. 180); *AKPATANTINON*. *Rev.* Crab; above, vine leaf; below, fish (*polyprum cernium*, cf. no. 174).
 Priv. coll.

183 ACRAGAS, c. 413–406 BC Drachm.
Obv. As no. 175. *Rev.* Crab with shell in form of human face; to l., barley grain; below, prawn; to r., cicada.
 Palermo.
Note. For this treatment of the crab's shell, cf. no. 171 (Pl. 59).

SELINUS

The westernmost of the Greek cities in Sicily, it was founded in 651 (or 628) BC from Megara Hyblaea; it derived its name from the *σέλινον* or wild parsley which grew on the banks of the local river of the same name; as the city badge, a leaf of this plant is always present on the coins.

The first didrachms of Selinus (nos 184, 185, Pl. 66) are among the earliest in Sicily, and in types, fabric and weight standard seem to owe more to external influences than do the other early coinages of the island. Probably soon after 500 BC another leaf and the city's name were inserted in the incuse square of the reverse. It is not clear when this early coinage came to an end, but it may be c. 480 BC; at this time Selinus seems to have unwisely sided with the Carthaginian invader, so that her prosperity may have declined somewhat in the years following the battle of Himera.

From about 465 BC until destroyed by the Carthaginians in 409 BC Selinus issued a small series of tetradrachms (15 *obv.* dies) with Apollo and Artemis in a quadriga on obverse and a young river-god (Selinus) sacrificing on reverse. For long these types were interpreted as alluding to the engineering work, whereby Empedocles is said to have drained an area around Selinus, and so to have freed the citizens from malaria; Lloyd, however, has shown not only that the exploit attributed to Empedocles is highly improbable, but that, even if it were historical, the coin types were instituted at an earlier date (NC 1935, pp. 73ff.).

The last coin of Selinus (no. 191, Pl. 68) has a chronological importance, for the treatment of the horses closely resembles Syracuse no. 107 (Pl. 37); since this is the only galloping quadriga at Selinus, it was probably copied from the Syracusan model; and since Selinus was destroyed in 409 BC, the die was probably made shortly before this date, and the Syracusan die perhaps a year or two earlier again.

About the middle of the century Selinus issued a number of didrachms (no. 187, Pl. 67). The obverse type showing Heracles capturing the Cretan bull appears to allude to the neighbouring town of Heraclea Minoa, a colony of Selinus.

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Plate 66

184 SELINUS, c. 520 BC Didrachm: 8.50 gm.

Obv. Leaf of wild parsley. *Rev.* Incuse square irregularly divided.

Brussels; *Colln. Hirsch* 526.

185 SELINUS, c. 500 BC Didrachm: 8.58 gm.

Obv. As no. 184. *Rev.* Incuse divided into six raised and six sunk triangles.

Priv. coll.

186 SELINUS, c. 467–445 BC Tetradrachm: 17.55 gm.

Obv. Quadriga, horses walking, driven by Artemis, and carrying Apollo shooting with bow and arrow; $\Sigma\epsilon\alpha\iota\nu\omicron\tau\iota\omicron\sigma$ retrograde. *Rev.* Young, naked, horned river-god (Selinus) sacrificing from phiale over rectangular altar and holding laurel branch in l. hand; the altar is wreathed and a cock stands in front; to r., a bull standing on a base, and a leaf of wild parsley; $\Sigma\epsilon\alpha\iota\nu\omicron\sigma$.

Brussels; *Colln. Hirsch* 467. Schwabacher 1.

Plate 67

187 SELINUS, c. 460–450 BC Didrachm: 8.58 gm.

Obv. Heracles grasps bull by horn with l. hand and raises club in r.; $\Sigma\epsilon\alpha\iota\nu\omicron\tau\iota\omicron\sigma$ retrograde. *Rev.* River-god (Hypsas) sacrifices over altar as on no. 186; around the altar, a snake; to r., a crane and leaf of wild parsley; $\Upsilon\psi\alpha\sigma$

London (BM); *PCG*, pl. 16, 53.

188 SELINUS, c. 445–435 BC Tetradrachm: 16.72 gm.

Obv. As no. 186, but no legend. *Rev.* As no. 186, but Selinus wears himation, and there is no wreath on altar; $\Sigma\epsilon\alpha\iota\nu\omicron\tau\iota\omicron\sigma$.

London (BM). Schwabacher 15.

Plate 68

189. SELINUS, c. 417–409 BC Tetradrachm: 17.34 gm.

Obv. (not shown). As no. 190, but above, wreath, and in ex., fish. *Rev.* Young river-god sacrificing from phiale over lighted rectangular altar, before which stands a cock; he holds a laurel branch in l. hand; to r., butting bull on wreathed base, and wild parsley leaf; $\Sigma\epsilon\alpha\iota\nu\omicron\tau\iota\omicron\sigma$.

Priv. coll. Schwabacher 42.

190 SELINUS, c. 420 BC Tetradrachm: 17.12 gm.

Obv. As no. 188, but in ex., barley grain. *Rev.* As no. 189, but no wreath on base below bull.

London (BM). Schwabacher 35.

191 SELINUS, c. 410 BC Tetradrachm: 17.28 gm.

Obv. Quadriga, horses galloping, with female driver; above, wreath; in ex., ear of barley and $\Sigma\epsilon\alpha\iota\nu\omicron\tau\iota\omicron\sigma$. *Rev.* (not shown). As no. 190.

Berlin; Regling 572. Schwabacher 45.

Note. The arrangement of the horses is derived from Syracuse no. 107 (Pl. 37).

ERYX

An Elymian town in the extreme north-west corner of Sicily, Eryx was the site of an important cult of Aphrodite, who, with Eros, appears on the reverse of the only issue of tetradrachms (no. 192, Pl. 69). Much influenced by her greater neighbour, Segesta, in the last decade of the fifth century, Eryx had issued a few didrachms like nos 200, 201 (Pl. 70). Though situated well within the Punic zone of Sicily, nearly all the coins of Eryx are inscribed in Greek; the clumsy obverse of the tetradrachm here shown, however, strongly suggests that it is a work of the school of engravers which produced such Siculo-Punic issues as no. 196 (Pl. 69).

Plate 69

192 ERYX, c. 400–390 BC Tetradrachm: 17.25 gm.

Obv. Quadriga, horses galloping; above, Nike flies to crown driver. *Rev.* Aphrodite seated on stool; a dove alights on her outstretched r. hand; to l., Eros stands and raises r. arm towards her; $\epsilon\pi\upsilon\kappa\iota\nu\omicron\sigma$.

Paris.

193 ERYX, c. 400 BC Litra: 0.56 gm.

Obv. Hound standing on dead hare. *Rev.* Aphrodite seated on stool, holds branch in l. hand, and grasps forearm of standing youth with r.; $\epsilon\pi\upsilon\kappa\iota\nu\omicron\sigma$.

Berlin; Regling 537.

PANORMUS

Panormus (the modern Palermo) was an important Carthaginian town. Few coins bear the name of Panormus itself, and most of these are copied either from the issues of Segesta (no. 194, Pl. 69), or from those of some other Sicilian town of the last decades of the fifth century. There is, however, a much more extensive series of both tetradrachms and lower denominations, which are all inscribed ZIZ in Punic letters (no. 195, Pl. 69). Whatever the exact meaning of this word, which may be simply

the otherwise unknown Punic name of Panormus, there are good reasons for thinking that the coins signed ZIZ were struck at Panormus; especially significant is a coin inscribed Panormus on one face and ZIZ on the other. None of the issues signed ZIZ are earlier than the Carthaginian invasion of 410 BC, and the series extends into the second half of the fourth century, though the tetradrachms are probably all earlier than *c.* 375 BC, since most of them copy Syracusan originals of the last decade of the fifth century. From the second quarter of the fourth century the mint signing ZIZ seems to have declined, and thereafter minted only small denominations in silver and bronze. Its place for tetradrachms was taken by Rash Melcarth, perhaps because a mint in the north-west corner of the island was no longer well placed for supporting military operations, which were increasingly following the south coast.

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- 194 PANORMUS, *c.* 420 BC Didrachm: 8.69 gm. flies to crown driver; in ex., hippocamp and ZIZ (in Punic letters). *Rev.* Head of Arethusa wearing ampyx, pendent earring and necklace; around, three dolphins.
Obv. Hound; *IIANOPMOΣ*. *Rev.* Head of nymph. Priv. coll.
 Berlin; Regling 565
- 195 PANORMUS, *c.* 400 BC Tetradrachm.
Obv. (not shown). Quadriga, horses galloping; above, Nike

RASH MELCARTH

The 'Headland of Melcarth' has often been located at Cephaloedium (Cefalu), because the 'head' element is common to both names, and because some later coins of Cephaloedium bore a head of Heracles, who was identified with Melcarth. Heraclea Minoa has also been suggested, but is on the wrong side of the river Halycus, usually designated in treaties as the boundary between the Greek and the Carthaginian territories. Neither of these identifications is really convincing.

This mint appears to have succeeded ZIZ (Panormus) as a centre for tetradrachm production, and to have operated from about 375 BC. All the coins are by Punic engravers, and are stylistically remote from their models, the Syracusan decadrachms of Euaenetus (nos 104–106 Pls 34–36).

- 196 RASH MELCARTH, *c.* 375 BC Tetradrachm. of Arethusa copied from decadrachms of Euaenetus (nos 104–106, Pls 34–36); around, four dolphins.
Obv. Quadriga, horses galloping; above, Nike flies to crown driver; in ex., RASHMLQRT (in Punic letters). *Rev.* Head Priv. coll.

SEGESTA

Segesta or Egesta in the north-west corner of Sicily was the principal Elymian town. Thoroughly Hellenized, its non-Greek origin is evident only in the unusual forms, *ΣΕΓΕΣΤΑΖΙΒ* or *ΣΕΓΕΣΤΑΖΙΑ*, which the ethnic sometimes takes (nos 197–201, 203, Pls 70, 71). In constant conflict with Selinus, Segesta was responsible for inviting first the Athenians in 414 BC, and then the Carthaginians in 410 BC to intervene in Sicily.

The extensive series of didrachms begins about 480 BC, and continues throughout the century. The obverse always showed the river Crimisis in the form of a hound (nos 199, 200, Pl. 70), while the reverses carried a series of female heads derived from Syracusan models (compare no. 197, Pl. 70 with no. 80, Pl. 27; no. 198, Pl. 70 with nos 85, 86, Pl. 29). In the second half of the century, this coinage in turn provided prototypes for a number of minor coinages in north-west Sicily at Motya, Eryx and Panormus (no. 194, Pl. 69).

As often happened elsewhere, the coinage of Segesta developed beyond its traditional patterns in the last decade of the century; the very elaborate female heads (nos 203, 204, Pl. 71) recall certain Syracusan models (no. 115, Pl. 39), and the reverse of no. 202 (Pl. 71) is derived from Himera (no. 71, Pl. 22). Segesta, however, is remarkable in that, unlike so many other mints, she did not adopt the galloping quadriga type. Instead, as happened at Catana and Gela, the river-god abandoned his animal form and

appeared in human shape as a young huntsman resting, with his hounds at his side—perhaps the most original and charming theme in the whole Sicilian repertoire (nos 202, 203, Pl. 71). Despite Segesta's support of Carthage, her activity as a mint ceases abruptly at the end of the century.

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Plate 70

197 SEGESTA, c. 480 BC Didrachm.

Obv. (not shown). Hound with head lowered. *Rev.* Head of nymph Segesta, wearing diadem and necklace; ΣΕΓΕΣΤΑΖΙΒ.

Priv. coll.

198 SEGESTA, c. 460 BC Didrachm: 8.68 gm.

Obv. (not shown). As no. 199. *Rev.* Head of nymph Segesta, wearing diadem and with hair coiled on neck; ΣΕΓΕΣΤΑΖΙΒ.

Priv. coll.

199 SEGESTA, c. 460 BC Didrachm: 8.52 gm.

Obv. Hound with tail raised. *Rev.* As no. 197, but outside linear circle, ΣΕΓΕΣΤΑΖΙΒ.

Paris; *Colln. de Luynes* 1110.

200 SEGESTA, c. 410 BC Didrachm: 8.67 gm.

Obv. Hound and three stalks of barley; below, on tablet, ΣΕΓΕΣΤΑΖΙΒ. *Rev.* (not shown). As no. 201.

Berlin; Regling 566.

201 SEGESTA, c. 405 BC Didrachm: 8.52 gm.

Obv. (not shown). As no. 200. *Rev.* Nymph Segesta with hair tied at back of head, ends loose; ΕΓΕΣΤΑΙΟΝ.

Berlin.

Plate 71

202 SEGESTA, c. 410 BC Tetradrachm: 17.25 gm.

Obv. Young, horned river-god resting on two spears; chlamys over crooked l. arm; l. foot resting on rock; at his side, hound; ΣΕΓΕΣΤΑΙΟΝ. *Rev.* Nymph Segesta, wearing chiton and himation, sacrificing from phiale over wreathed, rectangular altar with upright projections (*cf.* no. 71, Pl. 22); in l. hand, laurel branch; on r., Nike flies to crown her.

Paris; *Colln. de Luynes* 1121. Lederer 4.

203 SEGESTA, c. 405 BC Tetradrachm: 16.85 gm.

Obv. Young, naked huntsman, with cap (pilos) slung behind head and chlamys over l. arm, resting l. foot on rock; at his feet, two hounds, one alert, one sniffing scent; to r., small ithyphallic herm wearing conical cap; ΣΕΓΕΣΤΑΙΟΝ. *Rev.* Head of nymph Segesta wearing pendent ear-ring and necklace with pendants; hair in ampyx and star-embroidered saccos; below, stalk of barley; ΣΕΓΕΣΤΑΖΙΑ.

London (BM); *PCG*, pl. 16, 51. Lederer 6.

204 SEGESTA, c. 405 BC Tetradrachm: 16.96 gm.

Obv. (not shown). Same die as no. 203. *Rev.* As no. 203, but no stars on saccos and ΣΕΓΕΣΤΑΖΙΒ.

Berlin; Regling 567. Lederer 5.

Note. For the reverses of nos 203 and 204, compare Syracuse no. 115 (Pl. 39).

CARTHAGE SICULO-PUNIC ISSUES

The Carthaginians, like the Phoenicians and the Etruscans, were slow to adopt the Greek practice of coining, and at first did so only when such coins were needed for transactions with neighbouring Greek or Hellenized communities; thus, in the second half of the fifth century Motya and Panormus (no. 194, Pl. 69) slavishly followed Greek models and inscribed their coins in Greek. Only with the Carthaginian invasions from 410 BC onwards does the Punic script replace Greek at Motya, Solus and Panormus (see above, p. 298f.), though the coin-types themselves continue to be crude copies of Greek originals. So far Carthaginian coining in Sicily had been confined to the Punic settlements in the island, but in the early fourth century a new phenomenon appears, coins minted in Sicily by Carthage for the use of her armies there. Occasionally they bear the name of Carthage herself (no. 205 *obv.*, Pl. 72), but more usually a phrase indicating some other location or authority: 'the paymasters', 'the camp' (no. 205 *rev.*, Pl. 72), 'the people of the camp' (nos 206–209, Pls 72, 73), and 'in the land' (*i. e.* not in the city, no. 211, Pl. 74).

The types are often still derived from Greek models, mainly Syracusan (compare no. 205 *obv.*, Pl. 72 with no. 126 *rev.*, Pl. 46), and the head of Arethusa from the decadrachms of Euaenetus was especially favoured (no. 206, Pl. 72); indeed, the best of the Siculo-Punic dies were certainly engraved by Greek craftsmen, and all the coins shown on Pls 72 and 73 belong to this class. The bulk of these coinages, however, was the work of Punic copyists, whose style can be seen on Pls 69 (nos 195, 196) and 74. Whereas all the silver here discussed seems to have been struck in Sicily, the Carthaginian gold (no. 210, Pl. 74) and electrum was probably minted in the capital itself.

In the Siculo-Punic types, there are two more or less constant elements, the horse and the palm-tree, which occur in conjunction, especially on the silver issues, more regularly than the selection here given suggests (nos 205, 206, Pl. 72). Since the Greek for palm is *φοῖνιξ*, there can be little doubt that this is a pun on 'Phoenician' or 'Punic', serving to identify to Greeks the source of an unfamiliar coin bearing an unintelligible script. The horse, whatever its precise significance in Carthaginian iconography, evidently served as a similar identifying symbol for Carthaginians; it is perhaps significant that of the gold and electrum issues, struck at Carthage itself, very few bear the palm-tree in addition to the horse.

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Plate 72

205 SICULO-PUNIC, *c.* 390–380 BC Tetradrachm: 16.85 gm.
Obv. Nike flies to crown galloping horse; on base line, QRTChDShT in Punic letters (= Carthage). *Rev.* Date palm; MChNT in Punic letters (= 'the camp').
London (BM); *PCG*, pl. 26, 40.

206 SICULO-PUNIC, *c.* 350 BC Tetradrachm: 16.97 gm.
Obv. Head of Arethusa with reed in hair, wearing necklace and pendent ear-ring; around, four dolphins; to l. cockle-shell. *Rev.* Horse's head and date-palm; AMMChNT in Punic letters (= 'people of the camp').
Priv. coll.

207 SICULO-PUNIC, *c.* 360 BC Tetradrachm: 17.17 gm.
Obv. Female head wearing tiara bound with palmette embroidered band. *Rev.* Lion and date-palm; ShAMMChNT (= 'the people of the camp').
London (BM); *PCG*, pl. 26, 41.

Plate 73

208 SICULO-PUNIC, *c.* 340 BC Tetradrachm.

Obv. As no. 207, but ear of barley(?) in hair, and no band.
Rev. As no. 207.
Syracuse.

209 SICULO-PUNIC, *c.* 360 BC Tetradrachm.
Obv. As no. 207, but no embroidery on band. *Rev.* As no. 207.
Priv. coll.

Plate 74

210 SICULO-PUNIC, *c.* 260–240 BC
Gold 1½-shekel piece: 12.48 gm.
Obv. Head of Persephone-Tanit wearing barley wreath, pendent ear-ring and necklace. *Rev.* Horse with head reverted.
London (BM); *PCG*², pl. 52, 34.
Jenkins/Lewis, p. 108, no. 377,2.

211 SICULO-PUNIC, *c.* 270–260 BC Decadrachm: 37.88 gm.
Obv. As no. 210. *Rev.* Pegasus flying; BARZT in Punic letters (= 'in the land').
Hess/Leu 24. 3. 1959, 125. Jenkins/Lewis, p. 130, no. 25.

SOUTH ITALY

Italy south of Campania shares a number of features with Sicily; here, too, the Greeks were intruders, settling on the coasts and penning the existing population in the interior. In time the Greeks had to fight to maintain their independence against these peoples; some were overrun, but subjection to partly Hellenized Samnites, Lucanians or Bruttians did not mean the end of civilized life, so that some mints, such as Taras or Thurium or Velia, can show a continuous activity until well into the third century, which has no parallel in Sicily. Like Sicily, too, South Italy had insufficient local supplies of silver for her needs; bullion had to be imported, perhaps from Etruria in exchange for Greek manufactured goods, and, in consequence, South Italian coins, like Sicilian, were hardly ever exported.

As in Sicily, the early coinages of South Italy owe little to external influence, except at Velia, a late Phocaean foundation, where the first coinage has a lumpy fabric and a type of reverse punch characteristic of the Aegean. Elsewhere the most distinctive feature, peculiar to South Italy, is the incuse fabric, whereby the reverse of the coin bears an incuse version of the obverse type (*e. g.* no. 264, Pl. 92); in effect, this means that the flan was compressed into a thin sheet between two interlocking dies. This technique not only involved much labour in the preparation of the dies, but required a device to ensure that both dies always worked in the same axis.

Many reasons have been suggested for the adoption of this curious technique, but none are wholly convincing. It is perhaps no more than an early attempt to produce a neat coin—in this it was certainly successful—which was later seen to be unnecessarily elaborate. Another remarkable feature of the incuse technique is that it was adopted, apparently soon after 550 BC, by three quite independent cities, Croton, Metapontum and Sybaris; certainly later, perhaps about 530 BC, it spread from Croton to Caulonia, and from Sybaris overland to Poseidonia. Thus in the last quarter of the sixth century all the mints of South Italy, apart from Velia, were using a uniform technique, though Poseidonia at this time was minting on a weight standard appropriate only to Campania.

This uniformity was shattered when Croton destroyed Sybaris in 510 BC, and ended her activity as a major mint. At the same time the coinage of Poseidonia, apparently dependent on trade from the south, was interrupted for about thirty years. Elsewhere the incuse flans, while keeping the same weight, contracted and became thicker, a change not to be seen in the coinage of Sybaris ending 510 BC; Laus (no. 215, Pl. 76) and Croton in alliance with Sybaris (no. 266, Pl. 92) are examples of this phase. At this time, too, Taras, a mint with a great future, makes her first appearance with incuse coins in this modified fabric (nos 294–296, Pl. 102). Indeed, the early fifth century saw a substantial increase in the number of mints, for Terina (no. 272, Pl. 95), Rhegium (no. 281, Pl. 99) and Cumae all begin at this time, and Poseidonia, perhaps stimulated by refugees from Sybaris, resumed her coinage about 470 BC, now with types in relief on both faces, and conforming in her weight standard to the cities of the south. Nevertheless the activity of many of these new mints was still slight, and Metapontum, Croton and Caulonia remained the principal producers of coin until the middle of the fifth century. By this time the incuse fabric had reached its final phase (surviving at Croton and Metapontum only), in which the flans became so thick that there was no longer need to keep obverse and reverse dies in the same axis; as a survival, which had lost its *raison d'être*, it was now abandoned.

From about the middle of the century South Italian coinage began to assume the appearance it was to retain until the area was absorbed into the Roman state. The standard coin, smaller than in Sicily, was a two or three drachma piece (stater), weighing 7–8 gm. according to the local system. Larger coins were used regularly only at Rhegium (nos 281–290, Pls 98–100), the coinage of which belongs to the Sicilian rather than the Italian sphere, and less frequently at Metapontum (no. 242, Pl. 84) and Thurium (nos 252, 253, Pl. 87). The balance between the mints was changing too; Sybaris, though refounded, had never recovered from the disaster of 510 BC; Croton, after a brief supremacy, suffered defeat and internal strife, and was eclipsed by Thurium; and Metapontum declined before the rising power of Taras. At this time, too, a more or less standard design emerged—a head of a deity on obverse, and a more distinctive design with a local reference upon the reverse; this pattern was followed at Velia (nos 226, 227, Pl. 80), Thurium (nos 250–254, Pls 86–88), Metapontum (nos 233–249, Pls 82–85), Heraclea (nos 255–258, Pls 88, 89), Terina (nos 272–280, Pls 95–97), Cumae (nos 320, 321, Pl. 110) and Neapolis (nos 322–325, Pl. 110). The principal exceptions were Caulonia and Poseidonia with full-length figures of the local deities, and the long and varied series of horsemen at Taras.

In the century between 450 and 350 BC a number of mints either closed or became virtually inactive, Poseidonia, Caulonia, Terina, Rhegium and Cumae; output remained heavy, however, at Velia, Taras, Thurium and Metapontum, with lesser coin-

ages at Heraclea, Croton, Locri and Neapolis. It is not surprising at this time to find reflections in South Italy of the work of the great Sicilian engravers (e. g. Terina, no. 280 obv., Pl. 97), though difference of subject matter usually makes comparison difficult; there is no absolutely certain example of a Sicilian engraver taking refuge, as well he might, in South Italy, though a signature of Euaenetus has been claimed at Terina, and Phrygillos of Syracuse (no. 107 rev., Pl. 37) might be the man who signed Φ at Terina (nos 275, 276, Pl. 96) and Thurium (no. 251, Pl. 86), and $\Phi\rho\nu$ - at Thurium. A number of South Italian engravers' names are known, among them Aristoxenus at Metapontum (nos 237, 239, Pl. 83) and Heraclea, Π - at Terina (no. 278, Pl. 97), Cleudorus at Velia (no. 226, Pl. 80) and Molossus at Thurium.

Though the issues of the great South Italian mints appear to follow each other effortlessly with little decline in either weight or in artistic quality, the coinage from time to time conveys hints of the increasing pressures under which the Greeks were living. Cumae was overrun by the Campanians, Caulonia and Rhegium were destroyed by Dionysius of Syracuse; Poseidonia's last coinage is signed with an Italic name, Dossennos (no. 222, Pl. 78). Even where activity was unabated, the exceptional gold coinage of Metapontum (nos 244, 245, Pl. 85) indicates an emergency, as does the appeal of the young Taras to Poseidon (no. 315, Pl. X). From 334–331 BC temporary support against the encroaching Italian tribes was obtained from Alexander the Molossian (no. 318, Pls XI and 109), and fifty years later Pyrrhus, king of Epirus, was invited to become the champion of Greek civilization in South Italy and Sicily (nos 472, 473, Pl. 150). By this time, however, the enemy was no longer mountain tribes, tough but disunited, but the far more formidable power of Rome. After some initial success Pyrrhus was defeated in 275 BC, and thereafter Greek cities such as Locri remained independent only by the grace of Rome (no. 293, Pl. 101). In the course of the second Punic war the surviving Greek coinages were extinguished and replaced by the Roman denarius.

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SYBARIS

AMI-, SIRINOS AND PYXUS, LAUS

Sybaris, founded c. 720 BC, was the oldest of the South Italian colonies from Achaea, and by the time of its destruction by Croton in 510 BC it had acquired a unique reputation for wealth and luxurious living. This prosperity was due mainly to cultivation of the Crathis plain, but the overland trade route to Etruria seems also to have played a part. Sybaris also enjoyed considerable political power, though ancient written sources are not explicit about its extent; some indication, however, of its direction is provided by those coinages which adopted the Sybarite type of the bull with head reverted (no. 212, Pl. 75). The very rare coin signed Ami- (or Asi-) is little help, because neither the full name nor the site are known (no. 213, Pl. 75). More informative is the joint issue of Sirinos and Pyxus (no. 214, Pl. 76). The site of Pyxus (the later Buxentum) is on the west coast, but Sirinos was a puzzle so long as it was directly connected with Siris (destroyed c. 550 BC?) on the south coast, for a joint issue by two towns so far apart, and effectively separated by substantial mountain ranges, seemed improbable. Recently, however, a site still named Sirino has been located a short way inland from Pyxus; both were probably native communities partly Hellenized by, if not in the political power of, Sybaris, because they lay on a route between south and north.

Laus, also on the west coast, was a colony of Sybaris where many Sybarites found refuge after the destruction of their homeland in 510 BC. The first coinage of Laus (no. 215, Pl. 76) is later than this, and was due to these Sybarite exiles, who showed the local river-god in a form similar to that of the Sybarite bull; somewhat unusually he was given a complete human head instead of a human face only. In the second quarter of the fifth century Laus abandoned the incuse technique, and gave her river-god a human face only (no. 216, Pl. 76).

These Sybarite types, together with another at Pandosia in the upper Crathis valley, show Sybarite influence spreading to the west coast of Italy, and towards the north, where Poseidonia stood at the end of the land route from the south. After her destruction in 510 BC Sybaris was refounded and led a chequered but undistinguished career until at least the fourth century (see also under Thurium p. 308).

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Plate 75

212 SYBARIS, c. 550–530 BC Stater: 7.89 gm.
Obv. Bull with head reverted; ΣY . *Rev.* Same type, incuse.
 Priv. coll.

213 AMI- (or ASI-), c. 550–530 BC Stater: 7.71 gm.
Obv. As no. 212, but above, cicada; AMI ($\Lambda \Sigma I$). *Rev.* Same type, incuse.
 Naples.

Plate 76

214 SIRINOS and PYXUS, c. 550–530 BC Stater: 8.08 gm.
Obv. As no. 207; $\Sigma I P I N O \Sigma$ retrograde. *Rev.* (not shown).
 Same type, incuse; $\Pi Y X$.
 Hess/Leu 16. 4. 1957, 38.

215 LAUS, c. 490 BC Stater: 7.98 gm.

Obv. Bull with horned, human head reverted; hair covered by cap; $\Lambda A F I$. *Rev.* (not shown). Same type, incuse; $N O \Sigma$, completion of ethnic from obverse.
 Berlin; Regling 237.

216 LAUS, c. 470–460 BC Stater: 8.02 gm.

Obv. Man-face bull with head reverted; in ex., acorn; $\Lambda A I$.
Rev. Man-faced bull; $\Lambda A I$.
 London (BM); PCG, pl. 6, 7.

POSEIDONIA

The origin of Poseidonia, which goes back to the late eighth century, is uncertain; often called a Sybarite colony, it seems that the Sybarites arrived only comparatively late in its history, when the city was already well established. When its coinage began c. 530 BC, there is no reason to doubt that relations with the south were close, for though Poseidonia at first adhered to a local weight standard, she adopted the incuse fabric of Sybaris and the other Achaean colonies. Poseidon, after whom the city was named, always occupied the obverse; and his figure is usually rendered with the greatest skill and detail. It is interesting to compare the very similar and contemporary figures of Apollo at Caulonia (nos 259, 260, Pl. 90), which are, however, far more static and less detailed, and decline rapidly in quality after the first few dies. The incuse coinage of Poseidonia apparently ended c. 500 BC, perhaps as a direct result of the destruction of Sybaris in 510 BC.

About 470 BC coinage begins again; there is now a separate reverse type in relief (no. 221, Pl. 78), and the coins are struck on the Achaean standard of the south. This suggests the arrival of refugees from Sybaris, who in turn certainly took part in the later resettlement of that city in 454 BC. About 425 BC Poseidonia modernized her script, introducing Ionic in place of the traditional local letter-forms (no. 221, Pl. 78). About this time, too, the Lucanian tribes were beginning to overrun Poseidonia, though this seems not to have affected the essentially Greek character of her culture. Coinage continued at intervals until the fourth century; her last silver coin (no. 222, Pl. 78) bears an Italic name, but whether of ruler, magistrate or engraver is not known.

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Plate 77

217 POSEIDONIA, c. 510 BC Stater: 7.32 gm.
Obv. Poseidon, wearing chlamys and cap, brandishes trident;
ΠΟΣ. *Rev.* (not shown). Same type, incuse.
 Berlin; Regling 239.

218 POSEIDONIA, c. 520 BC Stater: 7.54 gm.
 As no. 217, but no cap.
 Berlin.

Plate VIII

219 POSEIDONIA, c. 530 BC Stater: 7.48 gm.
 As no. 218, but Poseidon apparently not bearded (*rev.* not shown).
 London (BM); *PCG*, pl. 6, 9.

Plate 78

220 POSEIDONIA, c. 500 BC Stater: 7.41 gm.
 As no. 218.
 Paris; *Colln. de Luynes* 526.

221 POSEIDONIA, c. 425 BC Stater.
Obv. Poseidon, wearing chlamys, brandishes trident; to l.,
 Θ; *ΠΟΣΕΙΔΑ.* *Rev.* Bull; *ΠΟΣΕΙΔΑΝ.*
 Priv. coll. Noe, *Museum Notes* V, no. 23.
Note. The letter *theta* on the obverse is part of an alphabetical
 sequence by which the dies were numbered. It is interesting
 that Ionic lettering is used on the obverse, whereas the tra-
 ditional. South Italian forms appear on the reverse; the coin
 was presumably minted just at the time when Ionic were
 replacing local forms.

222 POSEIDONIA, c. 350 BC Stater: 7.65 gm.
Obv. As no. 221, but to r., thymiaterion. *Rev.* Bull; on base,
 ΔΟΣΣΕΝΝΟ; above, ΠΟΣΕΙΔΩΝΙΑ.
 Hess/Leu 16. 4. 1957, 37.
Note. This coin has been fully discussed by P. Zancani Mon-
 tuoro, *Atti e Mem. Soc. Magna Grecia* 1958, p. 80ff. It is the
 latest known stater of Poseidonia and the name Dossennos is
 of Italian, not Greek, origin.

PALINURUS AND MOLPA

This issue of two towns, otherwise unknown, should be compared with that of nearby Sirinos and Pyxus (no. 214, Pl. 76). The incuse fabric and the weight standard indicate influence from the Achaean cities, particularly Sybaris, though in this case the Sybarite bull is not used as type.

Plate 79

223 PALINURUS and MOLPA, c. 530–510 BC
 Stater: 7.56 gm.

Obv. Boar; ΠΑΑ retrograde. *Rev.* Same type, incuse; ΜΟΑ
 retrograde.
 Paris; *Colln. de Luynes* 503.

SERDAIOI

Though sometimes attributed to Sicily because of the similarity of the types to those of Naxos (nos 1–5, Pl. 1), the weight standard and the use of *M* for *sigma* suggest the Achaean area of South Italy. That this latter context is correct has been recently confirmed by a bronze tablet discovered at Olympia recording a treaty between the Serdaioi and the Sybarites, to which the city of Poseidonia was a witness (*Olympia VII Bericht* (1961), p. 207). A settlement (perhaps from Naxos) on the west coast of Bruttium would best suit the evidence.

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Plate 79

224 SERDAIOI, c. 520 BC
 Stater: 7.96 gm.

Obv. Dionysus holding cantharus and vine branch; ΣΕΡ.
Rev. Vine branch with leaves and grapes.
 Paris; *Colln. de Luynes* 1138.

HYELE (VELIA, ELEA)

To escape Persian rule after the conquest of Lydia, some Phocaeans sought their fortune in the west Mediterranean where they had long had commercial contacts. Joining a Phocaean colony already established in Corsica they preyed upon Carthaginian and Etruscan trade, until compelled to seek another home after a costly and indecisive victory c. 535 BC. They then settled at

Hyele on the west coast of Italy. The earliest coinage (last quarter sixth century) was purely Aegean in fabric, and, indeed, Hyele never adopted the incuse technique characteristic of South Italy. During the fifth century a small coinage only was issued with a lion (the city's device) on the obverse and a nymph's head on the reverse (no. 225, Pl. 80). It is worth noting that the Ionic alphabet, which eventually became standard throughout South Italy, was first introduced by the Phocaeans and appears on their earliest inscribed coins. Its adoption by Poseidonia c. 425 BC has been mentioned above (no. 221, Pl. 78).

From about 400 BC the output of staters greatly increased; all now bore on the obverse the helmeted head of Athena, which the coinage of Thurium had introduced to South Italy; the reverses were occupied either by a lion or by a lion attacking a stag (no. 227, Pl. 80). Unusual is the facing head of Athena by Cleudorus (no. 226, Pl. 80), ultimately derived from that of Eucleidas at Syracuse (nos 111, 112, Pls IV and 39), and, like it, signed across the bowl of the helmet. In the fourth and third centuries Hyele became one of the most prolific and continuously active of the South Italian mints. Most of the coins bear a number of letters, monograms or symbols (*e. g.* no. 227 obv., Pl. 80), the full significance of which is not understood, but which show that some individuals, in whatever capacity, played a part in the issue of coinage for a number of years.

Plate 80

225 HYELE, c. 480 BC Didrachm: 8.03 gm.

Obv. Lion; above, *B.* *Rev.* Head of nymph Hyele; *YEAH.*
Paris; *Colln. de Luynes* 622.

(artist's signature). *Rev.* (not shown). Lion devouring stag's head; *YEAHTΩN.*

Priv. coll.

226 HYELE, c. 350 BC Didrachm.

Obv. Head of Athena facing, wearing necklace and winged and crested Phrygian helmet; on bowl, *ΚΛΕΥΔΩΡΟΥ*

227 HYELE, c. 280–260 BC Didrachm: 7.38 gm.

Obv. Head of Athena wearing crested Attic helmet; on bowl, griffin; on neck-guard, palmette; to l., *A*; to r., *IE* within square. *Rev.* Lion attacking stag; *YEAHTΩN.*

Munich.

METAPONTUM

Founded from Achaea about 680 BC under the leadership of Leucippus (nos 242, 243, Pl. 84), Metapontum was situated in a rich agricultural plain; the ear of barley which appears on every single coin of Metapontum proclaims this unfailing source of prosperity, as did the dedication of golden ears to Apollo at Delphi. In the archaic age, though Sybaris enjoys the greatest reputation in our sources, the coinage of Metapontum seems to have been more important than that of Sybaris, and it was certainly the most perfect expression of the incuse technique (no. 229, Pl. 81; the presence of symbols is unusual). Metapontum, too, was chosen, by the philosopher, Pythagoras, as his final home.

The incuse technique lasted at Metapontum until about the middle of the fifth century (see above, p. 302), when a transition to normal double relief coins took place; no. 230 (Pl. 82), identified by its reverse legend as a special issue, actually shares its obverse die with the incuse series. Coinage at this time was not plentiful (nos 231, 232, Pl. 82), and Metapontum may have been in temporary decline due to the liquidation of the Pythagorean order which had long governed the city. About 430 BC, however, coinage began again on a flexible pattern which was to last until the end of Metapontine coinage: on the obverse a changing divine head (no. 234, Pl. 82 is the first), on the reverse, unvaried, the city's name and badge, usually accompanied by issue marks.

These heads include Heracles, Apollo, Nike, Demeter, Persephone, Dionysus, Zeus, Hygieia, and Leucippus, the founder; this last in turn provided the model for the first silver issue to bear the name of Rome, the Romano-Campanian didrachms, some of which may have been struck at Metapontum itself during the war against Pyrrhus. At this time Taras was compelled to reduce her traditional weight standard; since Metapontum has no such coins of reduced weight, we may suppose that her main silver coinage had come to an end by 280 BC.

The remarkable gold issues (nos 244, 245, Pl. 84) are probably to be associated with the campaigns of Alexander the Molossian, who was invited to Italy in 334 BC as champion of the Greeks against the Italian tribes; the head of Nike would then allude to the success of his campaigns, which were terminated by his death in 330 BC. It has been suggested that some of Alexander's staters were struck at Metapontum, as others were minted at Taras (no. 318, Pls XI and 109), and it is tempting to see in the head of the founder Leucippus, which first appears at this time, a compliment to Alexander, honouring him as the city's second founder (nos 242, 243, Pl. 84).

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Plate 81

228 METAPONTUM, c. 550–530 BC Stater: 8.02 gm.
Obv. Ear of barley; *META*. *Rev.* Same type, incuse.
 Berlin. Noe 3.

229 METAPONTUM, c. 520–510 BC Stater: 8.22 gm.
Obv. Ear of barley; to r., cicada; *META*. *Rev.* Same type, incuse; to l., dolphin.
 Berlin. Noe 100.

Plate 82

230 METAPONTUM, c. 450 BC Stater: 7.47 gm.
Obv. (not shown). Ear of barley; to l., cicada; *META*.
Rev. Naked male figure with bull's head (the river-god Achelous), wearing chlamys, and holding phiale in r., and reed in l. hand; *ΑΕΘΑΙΟΝ ΑΧΕΛΑΙΟΙΟ* (= 'a prize of Achelous').

Berlin; Regling 366. Noe 311.

Note. The inscription of this exceptional coin indicates that it was given as a prize at games in honour of Achelous.

231 METAPONTUM, c. 450 BC Stater: 7.94 gm.
Obv. (not shown). As no. 228. *Rev.* Heracles holding club and bow.
 Leu, *Lucania* (1961), 37. Cf. Noe 313.

232 METAPONTUM, c. 450 BC Stater: 7.81 gm.
Obv. (not shown). As no. 228. *Rev.* Apollo holding laurel sapling and unstrung bow.
 Paris. Noe 315.

233 METAPONTUM, c. 420–400 BC Stater: 6.84 gm.
Obv. Head of Apollo Carneius with ram's ear and horn, wearing laurel wreath. *Rev.* (not shown). Ear of barley; *META*.
 Munich. Noe 336.

234 METAPONTUM, c. 430 BC Stater.
Obv. Head of young Heracles wearing lion-skin. *Rev.* Ear of barley; on l., fly; *META*.
 Naples. Noe 428.

235 METAPONTUM, c. 420–400 BC Stater.
Obv. Female head; to l., *E* reversed. *Rev.* Ear of barley; on r., cicada; *META*.
 Naples. Noe 405

Plate 83

236 METAPONTUM, c. 400–380 BC Stater.
Obv. Head of goddess wearing ear-ring, necklace and wreath of olive; on neck truncation, *ΑΡΙΣΤΟΞΕ* (artist's signature).
Rev. (not shown). As no. 235.
 Priv. coll. Noe 423.

237 METAPONTUM, c. 400–380 BC Stater.
Obv. Head of goddess wearing ampyx, ear-ring and necklace; to r., large *A*, between legs of which *ΠΙΣΤΟ* (artist's signature). *Rev.* (not shown). Ear of barley; *META*.
 Priv. coll.

238 METAPONTUM, c. 400–380 BC Stater: 7.75 gm.
Obv. As no. 237, but hair in star-embroidered sphendone.
Rev. (not shown). Ear of barley; *META*.
 Berlin. Noe 435.

239 METAPONTUM, c. 400–380 BC Stater: 8.07 gm.
Obv. As no. 237, but to r., *AP* (artist's signature). *Rev.* (not shown). Ear of barley; *META*.
 Berlin. Cf. Noe 424–427.

240 METAPONTUM, c. 350 BC Stater: 7.69 gm.
Obv. Head of Apollo wearing laurel wreath; on neck truncation, *ΑΙΙΟΑ*; below, *Σ*. *Rev.* (not shown). As no. 241; *META*.
 Munich. Noe 463.

241 METAPONTUM, c. 350 BC Stater: 7.95 gm.
Obv. Head of young Dionysus wearing a diadem ornamented with maeander pattern and with ivy leaves; below, *ΣΙΙ* and *Γ*. *Rev.* Ear of barley; *METAIΙ*.
 Priv. coll. Noe 456.

Plate 84

242 METAPONTUM, c. 330–300 BC Distater: 15.79 gm.
Obv. Bearded head of Leucippus wearing Corinthian helmet; on bowl, Nike driving quadriga, below which, hippocamp; to l., forepart of lion and *ΑΙΙΗ*. *Rev.* Ear of barley; to l., club and *ΑΜΙ*; *ΜΕΤΑΙΙΟΝΤΙΝΩΝ*.
 London (BM); SNG II, 376.

243 METAPONTUM, c. 330–300 BC Stater: 7.84 gm.
Obv. As no. 242, but helmet plain; to l., torch. *Rev.* (not shown). As no. 242, but *†H* and *META*.
 Leu, *Lucania* (1961), 84.
Note. In SNG V, 1 (A), 739 the symbol on the obverse was wrongly described by me as a 'bird-scarer'; it has also been called a stylis. Vase paintings, however, show that it is a torch with two flares (cf. Arias, *History of Greek Vase Painting*, pl. L).

244 METAPONTUM, c. 334–320 BC Gold drachma.
Obv. Head of Nike facing, wearing ear-ring and ampyx.
Rev. Ear of barley; to r., cantharus; *ΜΕΤΑΙΙΟΝ*.
 Priv. coll.

245 METAPONTUM, c. 334–320 BC Gold drachma: 2.52 gm.
Obv. As no. 244; to r., *ΝΙΚΑ*. *Rev.* (not shown). As no. 242.
 London (BM).

Plate 85

246 METAPONTUM, c. 330–300 BC Stater: 7.76 gm.
Obv. Head of Zeus wearing laurel wreath; to l., thunderbolt.
Rev. Ear of barley; to r., poppy-head and *KAA; METAION.*
 London (BM); *PCG*, pl. 31, 6.

247 METAPONTUM, c. 330–300 BC Stater: 7.89 gm.
Obv. Head of Demeter wearing wreath of barley and pendent ear-ring. *Rev.* As no. 246; to r., plough and *MA[N; META.*
 Hess/Leu 7. 4. 1960, 47.

248 METAPONTUM, c. 300 BC Stater: 7.90 gm.
Obv. Head of bearded Heracles wearing diadem and lion-skin knotted round neck, and carrying club over r. shoulder.
Rev. Ear of barley; *META.*
 Hess/Leu 2. 4. 1958, 19.

249 METAPONTUM, c. 330–300 BC Stater: 7.74 gm.
Obv. As no. 247. *Rev.* Ear of barley; to l., amphora and *ΦΙ;*
META.
 Priv. coll.

THURIUM

At the invitation of the displaced Sybarites Athens sponsored a Panhellenic settlement in South Italy which was finally established in 443 BC. At first called Sybaris, the name was changed to Thurium, when the Sybarites quickly fell out with the new colonists, and were expelled to found a new settlement again called Sybaris. A number of distinguished men were among the colonists of Thurium, including the orator Lysias and the historian Herodotus. Though no doubt originally founded as a centre of Athenian influence in the west, relations with Athens were not always friendly, and at the end of the century Thurian ships were serving in the Aegean against Athens.

Thurium immediately became a power to be reckoned with in South Italy; eclipsing Croton, she disputed with Taras the control of the fertile southern coasts of Lucania. Her plentiful coinage began soon after the foundation (no. 250, Pl. 86); the obverse always alluded to her mother-city by a head of Athena, which was copied at a number of South Italian mints, such as Velia, Heraclea (no. 257, Pl. 89) and Neapolis (compare no. 251, Pl. 86 with no. 322, Pl. 110); on the reverse was a bull, derived from Sybaris, at first walking (no. 251, Pl. 86), but by the end of the century normally charging with head lowered (no. 252, Pl. 87). Prolific coinages on this pattern lasted until well into the third century, by which time Thurium had become a Roman dependency; most issues are marked with abbreviated names or with symbols (no. 254, Pl. 88). Thurium is also remarkable among the South Italian mints (except Rhegium) for issuing a long series of distaters (nos 252–254, Pls 87, 88).

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Plate 86

250 THURIUM, c. 415–400 BC Stater: 8.05 gm.
Obv. Head of Athena wearing crested Attic helmet with ivy wreath. *Rev.* (not shown). As no. 251, but below bull, conical helmet.
 Berlin; Regling 512.

251 THURIUM, c. 415–400 BC Stater.
Obv. As no. 250, but wreath of olive; to r., *Φ.* *Rev.* Bull standing; on rump, *Φ;* below, bird with open wings; in ex., fish; *ΘΟΥΡΙΩΝ.*
 Paris.

Plate 87

252 THURIUM, c. 375 BC Distater: 15.89 gm.

Obv. As no. 250, but on bowl, Scylla and on neck-guard, griffin. *Rev.* Bull butting; in ex., fish; *ΘΟΥΡΙΩΝ.*
 Berlin. Noe C, 6.

253 THURIUM, c. 350 BC Distater: 15.37 gm.
Obv. As no. 252, but neck-guard plain. *Rev.* (not shown).
 As no. 252.
 Priv. coll. Noe E, 2.

Plate 88

254 THURIUM, c. 330 BC Distater: 15.55 gm.
Obv. As no. 252, but Scylla holds trident; on neckguard, *ΣΩ.*
Rev. As no. 252, but above, *ΣΩ;* between hind-legs, *ΑΡ* (monogram); in ex., two fish.
 Hess/Leu 16. 4. 1957, 45. Noe H, 26.

HERACLEA

The struggle between Thurium and Taras for the control of the South Italian plain was resolved by the joint foundation of Heraclea in 433 BC. The types of the mint reflect this joint origin, for the obverses carry a head of Athena derived from Thurium (compare no. 257, Pl. 89 with no. 251, Pl. 86), while the reverses show the Dorian hero, Heracles, wrestling with the Nemean lion; though this type was not used on the staters of Taras, various versions of it occur commonly on the smaller denominations. The earliest coinage of Heraclea, an isolated issue minted within a few years of the foundation, is not shown here; more continuous coinage started towards the end of the century (no. 257, Pl. 89), and set the remarkably high artistic standard which many subsequent issues were to equal; some artists' signatures exist including that of Aristoxenus who worked at Metapontum also (no. 237, Pl. 83). The silver coinage of Heraclea lasted until the middle of the third century, the standard having been reduced c. 280 BC.

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Plate 88

255 HERACLEA, c. 375 BC Stater: 7.96 gm.

Obv. Head of Athena, wearing crested Attic helmet with griffin on bowl; to r., Σ. *Rev.* Heracles, holding club in r., hand, kneels to grapple with lion; below, ΕΥ; in ex., stalk of barley; ΗΡΑΚΛΕΙΩΝ (for ΗΡΑΚΛΑΕΙΩΝ).

Berlin; Regling 720. Work 8.

Note. For another contemporary version of Heracles and the Nemean lion see Syracuse nos 127 and 129 (Pls VII and 46).

Plate 89

256 HERACLEA, c. 350–330 BC Stater: 7.79 gm.

Obv. As no. 255, but on helmet, Scylla, and on neck-guard, owl. *Rev.* Heracles stands to wrestle with lion; to l., club, bow and Α; †ΗΡΑΚΛΗΙΩΝ

Priv. coll. Work 24.

257 HERACLEA, c. 415–400 BC Stater: 7.90 gm.

Obv. As no. 250, but on helmet, hippocamp. *Rev.* As no. 256, but no Α; ΗΡΑΚΛΑΕΙΩΝ.

Berlin; Regling 507. Work 4.

Note. This coin has been struck upon a stater of Metapontum; the tips of the awn can be seen at the right hand edge of the reverse.

258 HERACLEA, c. 350–330 BC Stater.

Obv. As no. 256, but Scylla hurls rock; neck-guard plain; ΑΘΑΝΑ. *Rev.* As no. 257; †ΗΡΑΚΛΑΕΙΩΝ.

Priv. coll. Work 25.

CAULONIA

This Achaean foundation dates probably from the early seventh century. It was a place of secondary importance, which perhaps exported timber for ship-building from the local mountain forests. Its coinage began about 530 BC, employing the incuse technique of the Achaean colonies. The first dies (no. 259, Pl. 90) have a quality which was not long maintained (no. 260, Pl. 90). As at Croton and Metapontum the flans of the incuse coinage first contracted about 500 BC and then again near 480 BC; this last phase, however, was very brief at Caulonia, for types in relief on both faces were adopted from about 470 BC. The dies are often crudely executed (no. 261, Pl. 91), and were frequently kept in service until much damaged by wear. The coinage of Caulonia, which consists almost wholly of staters, ended when Dionysius I of Syracuse destroyed the town in 389/8 BC; a few very rare bronze coins are known before this date.

The much-discussed obverse type, a male figure carrying a branch, has recently been explained by L. Lacroix. Briefly, it is Apollo bringing laurel branches to Delphi from the Vale of Tempe, where he had gone to purify himself after slaying the serpent Python (compare Croton, no. 267, Pl. 93). The small figure on the god's arm is a messenger sent to announce his coming. The oracle of Apollo at Delphi played an important part in the foundation of colonies, for its approval was usually sought for new foundations (compare the tripod of Apollo as the principal type of Croton, nos 264ff., Pls 92, 93).

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Plate 90

259 CAULONIA, c. 530 BC Stater: 8.07 gm.

Obv. Naked Apollo, hair diademed and falling in long locks, brandishes branch in r. hand, and on l. arm supports small, running figure, looking back, who carries branch in each hand; to r., stag with head reverted; *KAYA*. *Rev.* Same type, incuse.

Berlin; Regling 241. Noe 1.

260 CAULONIA, c. 520–510 BC Stater: 7.94 gm.

Obv. and *Rev.* as no. 259.

Paris; *Colln. de Luynes* 679. Noe 18.

Plate 91

261 CAULONIA, c. 455–440 BC Stater: 6.55 gm.

Obv. As no. 259, but details of running figure obscure.

Rev. Stag; to r., branch; *KAYA*.

Berlin; Regling 369. Noe 95.

262 CAULONIA, c. 420–410 BC Stater: 7.70 gm.

Obv. Apollo, naked, holding branch; to l., fly; to r., stag.

Rev. (not shown). Stag; *KAYΛONIATAN*.

Berlin; Regling 515. Noe 127.

263 CAULONIA, c. 400 BC Stater: 7.77 gm.

Obv. (not shown). As no. 262, but stag on basis, and no fly;

KAYΛONIATAΣ. *Rev.* Stag; to l., plane leaf.

Munich. Noe 132.

CROTON

Croton was founded from Achaea at the end of the eighth century on the direct and insistent instruction of the oracle of Apollo at Delphi; it is for this reason that the tripod of Apollo appears so frequently on the coins of Croton. Another version recorded Heracles as the founder of Croton and builder of the local temple of Hera Lacinia. Apollo (no. 267, Pl. 93; no. 271, Pl. 94), Heracles (labelled as 'Founder' on no. 267, Pl. 93) and Hera (no. 270, Pl. 94) all appear at times on the coinage; the numerous eagle types (no. 265, Pl. 92; nos 268, 269, Pl. 93) relate to the worship of Zeus. After her destruction of Sybaris in 510 BC Croton became, under Pythagorean rule, the most flourishing city in South Italy, famous for her athletes and doctors. From about the middle of the fifth century, however, a decline began, which was hastened by the foundation and growth of Thurium.

The extensive and complex coinage of Croton has not yet been studied in detail, so that the dates of the later issues are somewhat uncertain. The incuse coinage began about the middle of the sixth century (no. 264, Pl. 92) and lasted, as at Metapontum, until about the middle of the fifth. A peculiarity of Croton is that the incuse reverse is often an eagle instead of a tripod (no. 265, Pl. 92); this caused no technical difficulty, partly because the depth of the incuse was much less than at Metapontum, and partly because the wings and body of the flying eagle corresponded with the legs of the tripod. The purpose of these eagle issues, which run parallel with the normal tripod types, is unknown; they may be the products of a subsidiary mint situated somewhere outside Croton itself.

Another interesting feature is the so-called 'alliance' series, in which a Crotoniate obverse type is combined with a reverse of another city. One of these records the subjection of resettled Sybaris to Croton after 510 BC (no. 266, Pl. 92); in addition, 'alliance' coinages with Laus and Pandosia are confirmed, while others have been claimed for Zancle, Caulonia and Mesma on insufficient evidence.

With the liquidation of the Pythagorean brotherhood in the middle of the fifth century the power of Croton declined; little coinage is attributable to the period 450–400 BC, though the survival of local letter-forms on the obverse of no. 267 (Pl. 93) suggests a date not much later than 420 BC. In the fourth century eagle types become more prominent (nos 268, 269, Pl. 93), and the traditional *koppa* is soon replaced by *kappa* (no. 270, Pl. 94). Croton fell into the hands of Rome during the war with Pyrrhus, and it is to this period that the final Crotoniate staters, on a reduced standard, belong.

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Plate 92

264 CROTON, c. 550–530 BC Stater: 7.99 gm.

Obv. Tripod; between its feet, two snakes; *PO*. *Rev.* Same type, incuse, without snakes.

Priv. coll.

265 CROTON, c. 550–530 BC Stater: 7.85 gm.

Obv. As no. 264. *Rev.* Flying eagle, incuse.

Berlin; Regling 242.

266 CROTON and SYBARIS, c. 500–490 BC Stater: 8.03 gm.
Obv. As no. 264, but no snakes. *Rev.* Bull with head reverted, incuse; in ex., ΣΥ.

London (BM); PCG, pl. 7, 16.

Note. This 'alliance' coin documents the existence, after 510 BC, of a resettled Sybaris subject to Croton.

Plate 93

267 CROTON, c. 420 BC Stater: 7.75 gm.

Obv. Young, naked Heracles, holding club and branch sits on rock, over which lion skin is spread; to r., bow and quiver; to l., lighted and wreathed altar; in ex., two fish; ΟΙΚΙΣΤΑΣ (= 'founder'). *Rev.* Tripod from which hang two tasselled fillets; on l., Apollo shoots at coiled serpent, Python, on r.; in ex., ΚΡΟΤΟΝ.

Berlin; Regling 517.

268 CROTON, c. 400–380 BC Stater: 7.87 gm.

Obv. Eagle standing on Doric architrave; below, regula and four guttae; on r., bucranium. *Rev.* Tripod; on r., sprig of olive; ρΡΟ.

Berlin; Regling 372.

269. CROTON, c. 400–380 BC Stater: 8.04 gm.

Obv. Eagle standing on stag's head. *Rev.* As no. 268, but on l., ivy leaf.

Hess/Leu 2. 4. 1958, 35.

Plate 94

270. CROTON, c. 360 BC Stater: 7.71 gm.

Obv. Head of Hera Lacinia facing, wearing stephane decorated with palmettes; to r., B. *Rev.* Young Heracles resting on lion-skin spread over rock; at his side, club and bow; in r., hand, cup; ΚΡΟΤΩΝΙΑΤΑΣ.

Paris; Colln. de Luynes 728.

271 CROTON, c. 350 BC Stater: 7.47 gm.

Obv. Head of Apollo wearing laurel wreath; ΚΡΟΤΩΝΙΑΤΑΣ. *Rev.* Child Heracles, seated on ground, strangles two snakes.

Priv. coll.

Note. For this reverse compare Thebes no. 454 (Pl. 145) and Samos no. 616 (Pl. 183).

TERINA

Little is known of the history of this Crotoniate colony on the west coast of Italy, and its chief monument is its coinage with a sequence of charming studies of the goddess of victory. Though the first issue may be as early as 480 BC (no. 272, Pl. 95), it was not until the second half of the century that they became at all frequent. In some dies the influence of Thurium is to be seen, and the Φ, which appears on some obverses (nos 275, 276, Pl. 96) may be the signature of the same engraver as at Thurium (no. 251, Pl. 86). Later the influence of the Arethusa heads of Cimon and Euaenetus at Syracuse makes itself felt (no. 280, Pl. 97). For similar and roughly contemporary seated figures of Nike compare Locri (no. 291, Pl. 101) and Elis (no. 498, Pl. 156). The series of staters probably came to an end when Terina was occupied by the Bruttians in 356 BC, though smaller silver denominations with the same types seem to have continued down to the end of the fourth century.

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Plate 95

272 TERINA, c. 480–460 BC Stater: 8.00 gm.

Obv. Head of nymph Terina wearing diadem; ΤΕΡΙΝΑ. *Rev.* Nike, wingless, holds olive branch; ΝΙΚΑ; the whole in a wreath of olive.

London (BM); PCG, pl. 14, 21. Regling, *Terina* 1.

273 TERINA, c. 440–430 BC Stater: 7.51 gm.

Obv. Head of nymph Terina wearing ampyx and necklace, within wreath of olive. *Rev.* Nike, with triple bracelet on l. arm, holding wreath and caduceus, sits on overturned hydria; ΤΕΡΙΝΑΙΟΝ.

Priv. coll. Regling, *Terina* 7.

274. TERINA, c. 430 BC Stater.

Obv. Head of nymph Terina wearing ampyx decorated

with olive wreath. *Rev.* Nike seated on rectangular base holds wreath and caduceus; ΤΕΡΙΝΑΙΟΝ.

Priv. coll. Regling, *Terina* 22.

Plate 96

275 TERINA, c. 425–420 BC Stater.

Obv. Head of nymph Terina wearing necklace and hair-band, with hair drawn to crown of head; to l., Φ (artist's signature); ΤΕΡΙΝΑΙΟΝ. *Rev.* As no. 274; hair is dressed in same style as on obverse.

Priv. coll. Regling, *Terina* 25.

276 TERINA, c. 425–420 BC Stater: 7.74 gm.

Obv. As no. 273, but ampyx ornamented with palmette and lotus pattern; to l., Φ (artist's signature). *Rev.* Nike sits

on overturned hydria; in r. hand, caduceus; in l., small bird with open wings; *TEPINAION*.
London (BM); *PCG*, pl. 14, 23. Regling, *Terina* 30.

Plate 97

277 *TERINA*, c. 420–400 BC Stater: 7.76 gm.
Obv. As no. 275, but to l., *II* (scarcely visible). *Rev.* Nike sits on rectangular base and supports bird on outstretched r. hand.
Berlin. Regling, *Terina* 64.

278 *TERINA*, c. 420–400 BC Stater: 7.73 gm.
Obv. As no. 277; to r., *II* (artist's signature). *Rev.* As no. 277,

but Nike holds staff terminating in pomegranate (? cf. no. 279 *rev*); to l., *II* (artist's signature).
Berlin. Regling, *Terina* 57.

279 *TERINA*, c. 420–400 BC Stater: 7.58 gm.
Obv. As no. 277, but no letter. *Rev.* As no. 277, but Nike holds wreath; by her feet, a pomegranate.
Berlin. Regling, *Terina* 69.

280 *TERINA*, c. 380 BC Stater: 7.57 gm.
Obv. Head of nymph Terina wearing necklace and pendent ear-ring; *TEPINAION*. *Rev.* As no. 277.
Berlin; Regling 732. Regling, *Terina* 80.

RHEGIUM

A Chalcidian colony founded in the late eighth century, Rhegium, owing to its position on the Straits of Messina, has closer connexions with Sicily than with the rest of South Italy. Indeed, numismatically, the only connexion with South Italy is the fact that its earliest coinage (surviving in a single specimen) employed the incuse technique, and was presumably minted at the time when this technique also made its only appearance across the water at Zancle (no. 48, Pl. 16). Apart from this forerunner, the coinage of Rhegium began under the tyrant Anaxilas c. 494 BC, employing types which he subsequently introduced to Messana (no. 50, Pl. 16). To celebrate an Olympic victory in 484 or 480 BC Anaxilas replaced these types with the mule-car/hare issues (no. 281 Pl. 99), at both mints (cf. Messana no. 51, Pl. 16). In 461 BC, when the sons of Anaxilas were expelled, the parallelism between Rhegium and Messana ended; for the next forty years at Rhegium the obverse was occupied by a lion's head and the reverse by a seated man, who is probably Iocastus, the founder (nos 282–287, Pls 98, 99); Rhegium's alliance with Athens at this time has no reflection in the coinage.

A further change c. 420 BC, when a head of Apollo replaced the figure of Iocastus (no. 288, Pl. 100), is not known to be associated with any political event; the coinage of Leontini (nos 20ff., Pls 7ff.) shows a similar combination of Apollo with a lion. This coinage was brought to an end when Dionysius I of Syracuse besieged and destroyed Rhegium in 387 BC. Subsequently the city was rebuilt by Dionysius II, who resided there 356–351 BC after he had been expelled from Syracuse; to this period belongs no. 290 (Pl. 100).

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Plate 98

281 *RHEGIUM*, c. 480–460 BC Tetradrachm: 17.38 gm.
Obv. Biga of mules with bearded male driver; in ex., laurel leaf. *Rev.* Hare; *PEFINON*.
Hess/Leu 24. 3. 1959, 41.
Note. For these types at Messana see nos 51 and 52 (Pl. 16).

282 *RHEGIUM*, c. 460–450 BC Tetradrachm: 16.98 gm.
Obv. Lion's head facing. *Rev.* Iocastus, draped at waist seated, holding sceptre in r. hand; around, olive wreath; *PEFINOZ*.
Munich. Herzfelder 8b.

Plate 99

283 *RHEGIUM*, c. 435–425 BC Tetradrachm: 17.08 gm.

Obv. (not shown). Same die as no. 287. *Rev.* As no. 282, but beneath seat, cat playing with ball.
Berlin; Regling 374. Herzfelder 48b.

284 *RHEGIUM*, c. 435–425 BC Tetradrachm: 17.34 gm.
Obv. As no. 282, but at root of nose two circles, each containing three pellets. *Rev.* (not shown). Same die as no. 285 London (BM); *PCG*, pl. 14, 20. Herzfelder 41c.
Note. The two circles at the root of the nose represent the wart sprouting hairs, which is to be seen in the profile view on early Lydian electrum.

285 *RHEGIUM*, c. 435–425 BC Tetradrachm: 17.36 gm.
Obv. (not shown). Same die as no. 284. *Rev.* As no. 282, but beneath seat, a hound.
Paris; *Colln. de Luynes* 788. Herzfelder 41b.

286 RHEGIUM, c. 435–425 BC Tetradrachm: 17.29 gm.

Obv. (not shown) and *Rev.*, as no. 282.

Priv. coll. Herzfelder 52.

287 RHEGIUM c., 435–425 BC Tetradrachm: 17.45 gm.

Obv. As no. 282, but on l., sprig of olive. *Rev.* As no. 282, but beneath seat, a duck.

Brussels; *Colln. Hirsch* 244 Herzfelder 46a.

Plate 100

288 RHEGIUM, c. 400 BC Tetradrachm: 17.29 gm.

Obv. Lion's head facing. *Rev.* Head of Apollo wearing laurel wreath; to l., olive branch; *PHFINON*.

Priv. coll. Herzfelder 76.

Plate IX

289 RHEGIUM, c. 390 BC Tetradrachm: 17.29 gm.

Obv. (not shown). As no. 288. *Rev.* As no. 288, but to r., swastika. London (BM). Herzfelder 98d.

Plate 100

290 RHEGIUM, c. 356–351 BC Tetradrachm: 16.82 gm.

Obv. As no. 288. *Rev.* As no. 288, but hair loose on neck; to r., *EY* (monogram).

Berlin; Regling 730. Herzfelder 117b.

LOCRI

Founded c. 673 BC by the Locrians of mainland Greece Locri possessed a famous code of laws, and by the sixth century was powerful enough to inflict a heavy defeat on Croton. It is, however, remarkable that despite obvious prosperity the Locrians minted no coinage before the fourth century. This fact is a reminder that in the ancient world a supply of coinage was by no means as indispensable as it is to the modern; it was essentially a means of making official payments in a medium recognized by the State. If the Locrian State was prepared to receive fines and taxes in bullion, or in some designated foreign coinage, or even in cattle or grain, specifically Locrian issues could be dispensed with.

The first coinage is an isolated one from the early fourth century (no. 291, Pl. 101); the goddess on the reverse may reflect some particular peace, or she may be a deity particularly worshipped at Locri, as was Nike at Terina (no. 272, Pl. 95); the immediate juxtaposition of the ethnic suggests that the latter is more probable. From about the middle of the fourth century Locri, like many other towns including Syracuse (no. 132, Pl. 47), was minting staters with Corinthian types (*cf.* no. 487, Pl. 153), so that it was not until the latter part of the century that independent Locrian types appear (no. 292, Pl. 101), some of which are overstruck upon the preceding issues with Corinthian types; the dies are sometimes so crudely executed as to suggest the hand of a non-Greek craftsman (*e. g.* no. 292, *rev.*, Pl. 101).

The last stater of Locri (no. 293, Pl. 101) carries an unusually specific allusion to a historical event, and in this recalls Roman rather than Greek types. The very close resemblance of the head of Zeus to that on the coinage of Pyrrhus (no. 472, Pl. 150) not only indicates the approximate date of the Locrian coin, but also suggests that some of Pyrrhus' coinage was struck at Locri during his Italian campaign. The reverse declares the loyalty of Locri, when Rome confirmed her independence after the defeat of Pyrrhus, though Locri had at first supported him.

Plate 101

291 LOCRI, c. 380 BC Stater.

Obv. Head of Zeus wearing laurel wreath; *ZEYΣ*. *Rev.* Eirene seated on rectangular base with a circular boss at each corner, and a bucranium on one side; she holds a caduceus; *EIPHNA* (= 'Peace') *ΔΟΚΡΩΝ*.

Naples.

Note. The date of 350 BC, or after, usually given to this isolated issue is surely too late. The head of the obverse is no doubt copied from a fifth century cult statue, but the reverse should not be far in date from Terina, no. 280 (Pl. 97).

292 LOCRI, c. 330–300 BC Stater: 7.72 gm.

Obv. As no. 291, but no legend. *Rev.* Eagle, with wings spread, devouring dead hare; to r., thunderbolt.

London (BM); *PCG*, pl. 31, 10.

Note. For obverse compare Metapontum, no. 246 (Pl. 85).

293 LOCRI, c. 274 BC Stater: 7.08 gm.

Obv. As no. 292, but under neck, monogram *NE*. *Rev.* Roma, with sword and shield, seated on throne is crowned by Pistis standing before her; each figure is labelled respectively *ΡΩΜΑ* and *ΠΙΣΤΙΣ* (= 'Loyalty'); in ex., *ΔΟΚΡΩΝ*.

Berlin; Regling 849.

TARAS

Taras, founded in the late eighth century, was Sparta's only colony; close relations with the mother-city were long maintained. Unlike some South Italian cities, which grew rapidly, Taras seems to have developed more slowly, and to have been of no great importance before about 500 BC, when her coinage begins. For a short time the incuse technique was employed (nos 294–296,

Pl. 102), but the flans are already contracted to the size which was current only after the fall of Sybaris in 510 BC. From the very beginning there appears the figure of Taras, the mythical eponym, riding upon a dolphin, a theme that is hereafter rarely absent; occasionally Taras is replaced by Apollo Hyacinthus, the god of Amyclae in Laconia (no. 295, Pl. 102), whence came the original settlers. Early in the fifth century the incuse reverse type was abandoned, though an incuse border still survived for a while (no. 297, Pl. 103).

The fifth century coinage of Taras is complicated, and its sequence is not yet finally determined; some types were certainly revived after periods of disuse. Broadly speaking, the hippocamp (no. 297, Pl. 103), human head (nos 301, 302, Pl. 104) and wheel reverses belong to the first half of the century, while the bulk of the 'seated oecist' series (nos 298–300, 303, 305, Pls 103–105) falls in the second, though a few earlier oecists (*e. g.* nos 298, 299, Pls 103, 104) are undoubtedly forerunners of the main series. It was not until about the last quarter of the fifth century that there first appeared the famous horseman type, which, unchanged in theme, but infinitely varied in detail, was to remain the badge of Taras for more than two hundred years (no. 304, Pl. 105).

No single identity will cover all the horsemen, who, though always beardless, vary considerably in age from the plump childish jockey to the mature youth. Some types are purely agonistic (nos 307 and 310, Pls 106, 107), others patently military (no. 312, Pl. 108); another, where a youth dismounts from a galloping horse, appears to be an act of equestrian skill (no. 308, Pl. 106). Sometimes the scenes are more complex, as where a groom removes a stone from the hoof of the winning horse (no. 310, Pl. 107), or a squire buckles on the cavalryman's cuirass (no. 313, Pl. 108), or the single horseman is replaced by the Dioscuri. The reverses also show much variation particularly in the objects held by Taras. The silver coinage continued in great abundance until the Pyrrhic war in which Taras supported Pyrrhus against Rome. After Pyrrhus' withdrawal from Italy Taras became an ally of Rome, but in the course of the third century her coinage declined and, after a final revival during the Hannibalic occupation, disappeared in the face of that of the Roman Republic. There was also an exceptionally large and varied output of small silver denominations, but very little bronze was minted.

Taras is also unusual in South Italy for the extent and variety of the gold issues (Pl. 109). Most of these belong from about 340–280 BC, a period when the Tarentines were under severe pressure first from the surrounding Italiote tribes and then from Rome; in this extremity help was repeatedly sought from the rulers of the more warlike districts of mainland Greece, who were not reluctant to seek their fortunes in the service of the rich cities of Sicily and South Italy. These gold coinages were no doubt minted to pay their mercenaries, and Alexander of Epirus appears to have used the mint of Taras to strike gold staters in his own name (no. 318, Pls XI and 109). The urgency of the times is graphically shown on the reverse of no. 315 (Pl. X), on which the young Taras appeals to his father, Poseidon, for weapons. Further gold issues were minted to pay Pyrrhus, and finally to finance Hannibal, when he occupied Taras during the Second Punic War.

Most of the coins bear letters or abbreviated names (*e. g.* *KAA* on nos 311–313, Pls 107, 108); these have sometimes, perhaps over-confidently, been interpreted as engraver's signatures, and equated with similar abbreviations at Heraclea or Metapontum. In most cases, however, there is no attempt at concealment, and it is, therefore, safer to regard them as the signatures of magistrates or mint officials.

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Plate 102

294 TARAS, c. 500 BC Stater: 7.99 gm.
Obv. Taras riding dophin; below, cockle-shell; ΤΑΡΑΣ retrograde. *Rev.* Same type, incuse.
Priv. coll. Vlasto 68.

295 TARAS, c. 500 BC Stater: 7.94 gm.
Obv. Apollo Hyacinthus, kneeling, holds flower in r. hand and lyre in l.; ΤΑΡΑΣ. *Rev.* Same type, incuse.
Berlin; Regling 235. Vlasto 70.

296 TARAS, c. 500 BC Stater: 7.50 gm.
Obv. (not shown). As no. 295. *Rev.* As no. 294, but no shell.
Paris; *Colln. de Luynes* 259. Vlasto –.

Plate 103

297 TARAS, c. 490 BC Stater: 7.98 gm.
Obv. Taras riding dolphin; ΤΑΡΑΣ retrograde. *Rev.* Hippocamp; below, cockle-shell; incuse border.
Paris; *Colln. de Luynes* 267. Vlasto 111 (obv.)/108 (rev.).

298 TARAS, c. 480 BC Stater: 8.05 gm.
Obv. Oecist seated holding distaff and cantharus; ΤΑΡΑΣ. *Rev.* Taras on dolphin; below, cockle-shell; ΤΑΡΑΣ retrograde.
Naples. Vlasto 162; Vlasto, ΤΑΡΑΣ 1.

Plate 104

299 TARAS, c. 480 BC Stater: 8.10 gm.
Obv. (not shown). As no. 298 (rev.), but below, cockle-shell and cuttle-fish. *Rev.* As no. 298 (obv.), but animal-skin hangs over seat.

Paris; *Colln. de Luynes* 270. Vlasto 167; Vlasto, *TAPAZ* 3.

300 TARAS, c. 450 BC Stater: 7.92 gm.
Obv. (not shown). As no. 298 (rev.). *Rev.* Oecist seated holds distaff and rests on long staff; *TAPAZ*.
 Priv. coll. Vlasto 186; Vlasto, *TAPAZ* 14 H.

301 TARAS, c. 470 BC Stater: 7.90 gm.
Obv. (not shown). As no. 302. *Rev.* Male head.
 Berlin; Regling 362. Cf. Vlasto 145/146.

302 TARAS, c. 460 BC Stater: 7.90 gm.
Obv. As no. 298 (rev.). *Rev.* Female head wearing necklace.
 Priv. coll. Vlasto 147.

Plate 105

303 TARAS, c. 430 BC Stater: 7.93 gm.
Obv. Taras on dolphin as no. 294; *TAPANTINON*. *Rev.* Oecist seated holding distaff and cantharus; l. foot on foot-stool.
 Priv. coll. Vlasto 213; Vlasto, *TAPAZ* 34.

304 TARAS, c. 420 BC Stater: 7.81 gm.
Obv. Taras riding dolphin over waves; *TAPAZ*. *Rev.* Young, naked horseman.
 Berlin; Regling 365. Vlasto 261.

305 TARAS, c. 425 BC Stater: 7.80 gm.
Obv. Taras carrying Boeotian shield, rides dolphin; below, cockle-shell. *Rev.* Oecist, seated, holds strigil and aryballos in l. hand, and balances distaff on r.
 Berlin; Regling 505. Vlasto 243; Vlasto, *TAPAZ* 53.

Plate 106

306 TARAS, c. 380–345 BC Stater: 7.81 gm.
Obv. Young, naked horseman with round shield on l. arm holds bridle with r. hand; below, *A*. *Rev.* Taras riding dolphin; below, *P*; *TAPAZ*.
 Priv. coll. Vlasto 381.

307 TARAS, c. 380–345 BC Stater: 8.03 gm.
Obv. Young, naked rider crowns horse; below, *A*. *Rev.* Taras riding dolphin holds out cantharus; below, *P*; *TAPAZ*.
 Priv. coll. Vlasto 414.

308 TARAS, c. 380–345 BC Stater: 7.95 gm.
Obv. Young, naked rider, carrying round shield, dismounts; below, *A*. *Rev.* Taras riding dolphin holds out aryballos(?); below, *Σ*; *TAPAZ*.
 Priv. coll. Cf. Vlasto 434/435.

Plate 107

309 TARAS, c. 380–345 BC Stater: 8.00 gm.
Obv. As no. 306, but wearing crested Attic helmet; below, *Δ*. *Rev.* As no. 307, but below, waves, small dolphin and *E*. Hess/Leu 16. 4. 1957, 17. Cf. Vlasto 387 (same obv. die).

310 TARAS, c. 344–334 BC Stater: 7.82 gm.
Obv. Young rider crowns horse, while another kneels to remove stone from hoof; to r., *Φ*. *Rev.* As no. 309, but round shield and trident in l. hand, and no small dolphin below.
 London (BM); PCG, pl. 25, 9. Vlasto 515.

311 TARAS, c. 344–334 BC Stater: 7.71 gm.
Obv. Young horseman carrying shield and two spears in l. hand, and third spear poised in r.; around, *τ*, *Δ*, *Δ*; below, *KAA*. *Rev.* Taras, riding dolphin, holds crested Phrygian helmet; l. and r., a star; below, *API*; *TAPAZ*.
 London (BM); PCG, pl. 25, 10. Cf. Vlasto 548.

Plate 108

312 TARAS, 344–334 BC Stater: 7.67 gm.
Obv. Nike restraining horse; the horseman wears crested Attic helmet, and in l. hand carries two spears and shield with hippocamp as blazon; around, *τ*, *M*, *Φ*; below, *KAA*. *Rev.* Taras, riding dolphin over waves, with chlamys on l. arm, carries two spears and brandishes a third; below, *KAA*; *TAPAZ*.
 London (BM). Vlasto 531.

313 TARAS, c. 334–332 BC Stater: 7.84 gm.
Obv. Young horseman stands beside horse, while his squire buckles his cuirass; on l., *τ*, *Δ*; below, *KAA*, *ΞΕ*; *TAPANTINON*. *Rev.* Taras, diademed, rides dolphin over waves, carrying two spears and shield with Pegasus as blazon; Nike flies to crown him; below, *KAA*; *TAPAZ*.
 Berlin; Regling 825.
 Cf. Vlasto 560–562 for this rev. die, but with different obv. type.

314 TARAS, c. 300 BC Stater: 7.85 gm.
Obv. As no. 311, but below, *ΣΑ*. *Rev.* Taras, riding dolphin, holds cantharus and trident; above, *AP* (monogram); below, small dolphin; *TAPAZ*.
 Priv. coll. Cf. Vlasto 605.

Plate 109

315 TARAS, c. 340–330 BC Gold stater: 8.56 gm.
Obv. Head of Hera, wearing stephane decorated with palmettes, veil, ear-ring and necklace; to l., *E*; to r., dolphin; *TAPA*.

Plate X

Rev. Poseidon, draped below waist, seated holding trident; on his lap, a bow; in front, a boy (horned?), wearing amulet on chest, raises hands in supplication; to r., a star; below, *K*, *τ*; *TAPANTINON*.
 Berlin; Regling 818. Vlasto 1.
Note. This remarkable reverse showing the boy Taras appeal-

ing to his father, Poseidon, has been associated with an appeal for aid against the surrounding Italian tribes either to Sparta, c. 338 BC, or to Alexander of Epirus, c. 333 BC.

Plate 109

316 TARAS, c. 340–330 BC Gold stater: 8.62 gm.

Obv. As no. 315, but no dolphin or letter. *Rev.* Naked rider crowning horse; to l., round shield; below, murex and Σ; ΤΑΡΑΣ.

Hess/Leu 16. 4. 1957, 19. Vlasto 2.

317 TARAS, c. 340–330 BC Gold half-stater: 4.30 gm.

Obv. As no. 315, but no veil; ΤΑΡΑΝΤΙΝΩΝ. *Rev.* Taras on dolphin, holding trident in l. hand and dolphin on outstretched r.; below, ⊥ H; ΤΑΡΑΣ.

London (BM); PCG, pl. 31, 4. Vlasto 5.

Plate XI

318 TARAS, struck 334–331 BC for Alexander, King of Epirus. Gold stater: 8.57 gm.

Obv. Head of Zeus of Dodona, wearing oak wreath.

Plate 109

Rev. Thunderbolt; on l., spear-head; ΑΛΕΞΑΝΔΡΟΥ ΤΟΥ ΝΕΟΠΤΟΛΕΜΟΥ (= 'A., son of Neoptolemus').

London (BM); PCG, pl. 31, 2.

319 TARAS, c. 300 BC Gold stater: 8.59 gm.

Obv. As no. 315, but around, three dolphins. *Rev.* Young rider crowns horse, and is himself crowned by flying Nike; below, ΣΑ; to r., dolphin and star; in ex., ΤΑΡΑΣ.

Hess/Leu 16. 4. 1957, 20. Vlasto 24.

CUMAE

Founded by Chalcidians about 750 BC, Cumae was the earliest Greek colony in the West; from its position it was clearly intended as a channel for trade with Etruria, and in the sixth and fifth centuries it acted as a barrier to the southward expansion of the Etruscans.

The coinage of Cumae is probably all confined to the fifth century, and came to an end when Cumae was overrun by Italian tribes c. 425 BC.

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Plate 110

320 CUMAE, c. 440–421 BC Stater: 7.27 gm.

Obv. Head of nymph Cyme. *Rev.* Mussel shell and grain of barley; ΚΥΜΙΟΝ.

Paris.

Note. The object on the reverse is usually described as a grain of barley, but is perhaps the hinged mussel shell seen from the side.

321 CUMAE, c. 440–421 BC Stater: 7.61 gm.

Obv. As no. 320. *Rev.* Scylla; below, mussel; ΚΥΜΑΙΟΝ retrograde.

London (BM).

NEAPOLIS

A comparatively late, but uncertainly dated, foundation from Cumae, Neapolis outlasted and outgrew her mother-city, to many of whose inhabitants she provided a refuge, when Cumae was overrun by the Italian tribes. In her later history, under the protection of Rome, Neapolis became an important South Italian mint with a very large output.

Apart from no. 322 (Pl. 110) which has a head of Athena very similar to that found at Thurium (no. 251, Pl. 86), the female head on the obverse is probably that of the Siren, Parthenope; as usual, the man-faced bull of the reverse will be the local river-deity.

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Plate 110

322 NEAPOLIS, c. 415–400 BC Stater: 7.45 gm.

Obv. Head of Athena wearing crested Attic helmet with olive wreath. *Rev.* Man-faced bull butting; *NEΠIOΛITEΣ*.

London (BM); *PCG*, pl. 13,5.

Note. For an exactly similar head at Thurium see no. 251 (Pl. 86).

323 NEAPOLIS, c. 440–420 BC Stater: 7.15 gm.

Obv. Female head; to r., *A.* *Rev.* Man-faced bull standing; below, *ΣΑ*; *NEΠIOΛITEΣ*.

London (BM); *SNG II*, 64.

324 NEAPOLIS, c. 440–420 BC Stater: 7.59 gm.

Obv. As no. 323, but no letter. *Rev.* As no. 323, but *NEΠIOΛ* only.

Berlin.

325 NEAPOLIS, c. 375 BC Stater: 6.82 gm.

Obv. Female head wearing broad hair-band, ear-ring and necklace; to l., *E.* *Rev.* As no. 323, but head turned to front, and Nike flying above; *NEΠIOΛITHΣ*.

London (BM).

ETRURIA

The Etruscans were an immigrant non-Greek people of central Italy, speaking a non-Greek language, though employing the Greek alphabet. During the sixth and fifth centuries huge quantities of Greek objects were imported into Etruria, probably in exchange for metal, so that Etruscan civilization became thoroughly Hellenized, though always retaining a flavour of its own.

Reliable chronological evidence for Etruscan coinage is still almost non-existent, but it is probable that the first coins are not as early as they seem. A curious feature of some Etruscan coins—and not always the earliest—is the blank reverse (*e. g.* no. 326, Pl. 111), otherwise found only on some Cypriot issues; the incuse reverses of some of the bronze coins can hardly be directly derived from the incuse techniques of South Italy.

Politically, the Etruscans formed a federation of twelve cities, only a few which are named on the coins. The series with the gorgon-head (no. 327, Pl. 111) belongs to Populonia on the evidence of inscribed specimens; the identity of Thezi (nos 328, 329, Pl. 111) remains uncertain.

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Plate 111

326 ETRURIA, c. 400 BC Stater: 10.87 gm.

Obv. Monster with forepart of lion and snake-like body ending in rearing head. *Rev.* Smooth.

London (BM).

327 POPULONIA, c. 225–200 BC Didrachm: 8.39 gm.

Obv. Gorgoneion; below chin. XX (= 20 units) off flan. *Rev.* Two caducei.

Hess/Leu 16. 4. 1957, 8.

Note. The date given is based on the fact that the weight standard and numerals employed on these coins appear to be the same as in the early denarius system of Rome (R. Thomsen, *Early Roman Coinage* 11, 287ff.).

328 THEZI, c. 375 BC Stater: 11.12 gm.

Obv. (not shown). As no. 329. *Rev.* Wheel; *ΘΕΖΙ*.

London (BM); *PCG*, pl. 13, 1.

329 THEZI, c. 375 BC(?) Stater: 11.27 gm.

Obv. Winged Gorgon running, carrying snakes. *Rev.* (not shown). As no. 328, but no legend.

Paris; *Colln. de Luynes* 8.

330 THEZI, c. 350–330 BC Stater: 9.39 gm.

Obv. Head and shoulders of cow; *ΘΕΖΑΕ*. *Rev.* Hippocamp, but with flippers instead of normal forelegs.

London (BM); *PCG*, pl. 25, 3.

GAUL

MASSALIA

Phocaeen trade in the western Mediterranean, partly in search of silver, goes back to the late seventh century; as a focal point of this trade Massalia (the modern Marseilles) was founded about 600 BC. Based on a fine harbour, it not only became in turn the mother-city of a number of colonies on the coasts of Gaul and Spain, but was also a most important channel for the spread of Hellenic civilization into the interior of Gaul.

Although Massalia minted some fractional denominations earlier, the main series of drachms, of which no. 331 (Pl. 112) is an early example, began no earlier than the middle of the fourth century. In the following centuries these drachms were the models for numerous imitations, found mainly in the Po valley and Switzerland; one find, however, has been made as far afield as Cornwall.

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Plate 112

331 MASSALIA, c. 350 BC Drachma: 3.69 gm.

Obv. Head of Artemis wearing olive wreath, ear-ring and necklace. *Rev.* Lion; below, O; ΜΑΣΣΑ.
London (BM).

Note. The obverse is an adaptation of the very popular head of Arethusa created by Euaenetus for the Syracusan decadrachms; see nos 104–106 (Pls 34–36). For other adaptations outside Sicily see Locri, no. 465 (Pl. 148) and Pheneus, no. 515 (Pl. 160).

HISPANIA

The rich silver-mines in southern Spain at Tartessos (probably the Tarshish of the Bible) became known to the Greeks in the late seventh century BC and stimulated much intercourse between the two ends of the Mediterranean. In the course of the sixth century the growing power of Carthage restricted Greek activity in the western Mediterranean, and by the end of the century southern Spain had become a Carthaginian preserve.

It was not, however, until the latter part of the third century BC, when Hamilcar Barca greatly increased the area of Carthaginian rule in Spain, that coins were issued. Long attributed to later north African rulers, their Spanish provenance and late third century date are now securely established. Nos 332 and 333 were probably minted at Carthago Nova (Cartagena), and no. 334 perhaps at Gades (Cadiz). It has been suggested that the heads on nos 332 and 333 may reflect the features of Hamilcar and of his son Hannibal, respectively.

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332 BARCIDS in Spain, c. 230–220 BC

Double-shekel: 14.61 gm.

Obv. Bearded head of Melcarth-Heracles, laureate, with club over r. shoulder. *Rev.* African elephant with cloaked rider carrying goad.

London (BM); *PCG*, pl. 37, 1. Robinson 6(a).

334 BARCIDS in Spain, c. 210–200 BC Shekel: 6.97 gm.

Obv. Head of Melcarth, laureate. *Rev.* African elephant; in ex., Punic letter, *aleph*.

London (BM); *PCG*, pl. 43, 30. Robinson 8(a).

333 BARCIDS in Spain, c. 230–220 BC

$1\frac{1}{2}$ shekel piece: 11.16 gm.

Obv. As no. 332, but no beard. *Rev.* As no. 332, but no rider.

London (BM); *PCG*, pl. 37, 2. Robinson 6(c).

GREECE, THE AEGEAN ISLANDS AND CRETE

In restricted areas such as Sicily, or even South Italy, it is possible to discern certain common and unifying features, but in mainland Greece (including the Aegean Islands and Crete) the extremes are too great; on the one hand Athens with a larger and more continuous output than any other mint, on the other Sparta, politically the equal of Athens, yet wholly lacking her own gold or silver coinage until a late date. The area includes the coinage of the Macedonian kings which, before Philip II, seems slender when compared with their ample mineral resources; it includes what today might be called the 'prestige' coinage of Elis, minted in connexion with the Olympic games; it includes the remarkable flowering of Cretan coinage towards the end of the fourth century, perhaps stimulated by mercenary soldiers returning from Hellenistic wars laden with pay and booty.

Fluctuations in the activity of single mints are no less dramatic. The enormous sixth century coinage of Aegina dwindles in the fifth century and almost disappears in the fourth; the insignificant output of the earlier fourth century kings of Macedon was transformed by Philip II into a gold and silver coinage of world importance; in the second half of the fourth century the re-organized mint of Corinth produced vastly more than ever before, apparently to meet western demands for her coinage; at Athens the third century appears to be a period of comparative inactivity between two centuries of heavy production.

Not even in the matter of weight standards is there the degree of uniformity that prevailed in Sicily or South Italy. Macedonia and Thrace are a jungle of frequently changing standards, including the Euboeic of the Chalcidian colonies, and at Aenus a standard based on the siglos surviving from the Persian occupation of the area. Most of mainland Greece (including the Peloponnese), as well as the majority of the Cyclades and Crete, employed what is now labelled the Aeginetan standard after the first great coinage to use it. In the middle of this considerable area, however, were Corinth (together with her colonies in western Greece), Athens and the cities of Euboea all using variations of the Euboeic standard. On the whole, coinage tended to flow between areas employing the same weight standard; for example, the large mid-fourth century hoard from Myron, near Karditsa, was made up of Boeotian, Sicyonian and Aeginetan issues, all on the same Aeginetan standard. An exception, perhaps accounted for by the nature of the site, is the deposit from the Isthmian temple, which, though in Corinthian territory, contained a high proportion of Aeginetan coins.

At most periods there were many mints which coined only small change for local circulation, but the monetary development of the area is best described by concentrating attention on the principal centres of production century by century. The idea of coinage came to Greece from Asia Minor, probably through the trading contacts of the Aeginetans, whose coinage was by tradition the earliest in the area. The Aeginetans were, however, responsible for an important innovation, for whereas the East Greeks had used electrum, originally a natural alloy of gold and silver, the Aeginetans preferred silver as being more readily available, especially from the mines of Siphnos and perhaps also from those of the north Aegean. For most of the sixth century the only really substantial coinage of central Greece was the Aeginetan, supplemented by the numerous much smaller coinages of the Aegean Islands, most of them on the same weight standard. Compared with the Aeginetan the early coinages of Athens and Corinth, though starting not much later, were comparatively insignificant in volume, while those of the Euboean cities were much smaller still. A totally different and seemingly unconnected group of coinages is that of the mining districts of the north Aegean. Starting about the middle of the sixth century they provide a clear case of the export of coined silver as one of the natural products of the region; these Thraco-Macedonian coins seem to have had little function locally, for they are normally found far from their mints of origin. From this whole pattern of coinages it can be seen that in the sixth century the emission of a substantial coinage did not depend on a trade, however vigorous, in olive oil or in black-figure pottery, nor upon the relations between mother-city and colonies, however numerous, but upon the immediate proximity and accessibility of mines producing an adequate supply of metal.

Yet by the end of the sixth century this pattern was being modified. The Persian occupation of Thrace and Macedonia, if it did not curtail production, at least diverted the products of the northern mines, and the mints of this area seem not to have again produced coinages of more than local economic importance, though often of great beauty, until the reign of Philip II. Aeginetan coinage, too, began to decline in volume from the early fifth century; there is some reason to think that the mines of Siphnos may have become exhausted or unworkable at this time, but a more important cause is no doubt the domination of the Aegean by Athens after the Persian Wars, which led to the loss of Aegina's political independence in 457 BC.

The one great coinage of the fifth century was that of Athens. Exploitation of the local sources of silver in Attica had certainly begun in the sixth century, but was probably stimulated by the loss of the north Aegean supplies after the Persian occupation of

that area. The richest strata were, however, also the deepest, and it was not until the early years of the fifth century that these began to be reached. Thereafter annual production was considerable until access to the mines was interrupted by the Spartan occupation of Decelea in 413 BC. Among her allies Athens insisted on the use of her own coinage in official transactions and banned the local minting of silver; such was the volume of her coinage that it attained the status of an international currency not only among the Greeks of the Aegean, but in the western provinces of the Persian Empire as well. Beside it the fifth century output of such mints as Corinth, Boeotia or Thessaly had little more than local significance.

The Peloponnesian war had exhausted Athens, and though coining began again early in the fourth century it seems to have been on a much reduced scale. Political power had now shifted to the Thebans, and it would be interesting to know whether their considerable coinage was struck from Attic silver. Under Philip II and Alexander III (the Great) Greece became a province of the Macedonian empire and used its coinage, though local coinages continued to be struck. At this time too Athens regained some of her lost ground, for her later fourth century coinage is found in quantity in areas in which issues on the Aeginetan standard had previously been dominant. This development was no doubted aided by the employment of the Attic weight standard for the far-flung coinages of Alexander the Great.

With the dissolution of Alexander's empire Greece became the prey of contending Hellenistic kingdoms, until the Roman Republic restored some stability in the area. Under Roman protection the mineral resources of Athens once again, and for the last time, enabled her to produce in the enormous issues of the New Style tetradrachms of the second and early first centuries BC another coinage of international importance.

AEGINA

Living on a mountainous island with only limited agricultural land, the Aeginetans were compelled to seek their living on the sea. They ranged far and wide over the Mediterranean and gained a great reputation as general traders and carriers of other people's goods rather than as producers; Aegina was the only city of mainland Greece to be represented at the trading settlement of Naucratis in Egypt. It is thus not surprising that an ancient tradition attributed to Aegina the earliest silver coinage; this claim is not contradicted by the coins themselves, though it is no longer possible to connect this early mint with King Pheidon of Argos, who lived not later than 650 BC.

Coinage first developed in Asia Minor in the period 650–600 BC, for it is only in this area and at this time that the most primitive and formative phases of coinage are found (as no. 583, Pl. 177); all other coinages, lacking these phases, are derivative. The first coins of Aegina cannot, therefore, be earlier than 600 BC and there is, in fact, no compelling reason to date them before the second quarter of the sixth century (no. 335, Pl. 113); the turtle on the obverse alludes to the marine interests of the Aeginetans, while the reverse bears only the imprint of the punch used to drive the metal into the deep hollows of the obverse die (no. 335, Pl. 113). Coins of this type were produced in such huge quantities that many were still being included in hoards buried up to two centuries later. The metal was probably obtained from the Aegean island of Siphnos (nos 527, 534, Pls 162, 163), where rich silver mines were at the height of their production in the sixth century (Her. III, 57). Strangely, this prolific coinage seems not to have been much used for foreign trade, for though occasional specimens are found far afield, finds show that the bulk of it remained within the area of the Cyclades and Crete.

This first phase lasted until the Persian wars. The reverse punch had originally consisted of an eight-pronged instrument which stamped out eight triangles; with use the prongs became broken or damaged, so that some triangles are absent or half-filled (no. 335, Pl. 113). Various other shapes of punch were tried, until a smaller, rougher version of no. 336 (Pl. 113) became normal. About 480 BC the designs were modernized, the turtle was given two extra pellets, which are not found in nature, and the reverse became a formalized lop-sided design, which was hereafter characteristic of the coinage of Aegina (no. 336, Pl. 113). For the next twenty years output was much less, for the silver of Siphnos seems to have been no longer available, and Aegina was dominated by Athens, now mistress of most of the Aegean.

In 457 BC Aegina was conquered by Athens and stripped of her maritime power; this may have been the occasion of the replacement, perhaps dictated by Athens, of the marine turtle by the terrestrial tortoise, which certainly took place some time before the Aeginetans were expelled by the Athenians in 431 BC. At the end of the Peloponnesian War they were restored to their homeland, whence further issues with a tortoise obverse were made during the fourth century (nos 337, 338, Pl. 113); the former lop-sided pattern was now further formalized into a rectangular design.

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III Mainland Greece and Asia Minor



Plate 113

335 AEGINA, c. 560–520 BC Stater: 12.40 gm.

Obv. Marine turtle. *Rev.* Incuse square divided into eight triangles (some blocked).

Paris; *Colln de Luynes* 2126.

336 AEGINA, c. 480–457 BC Stater: 12.47 gm.

Obv. As no. 335. *Rev.* Incuse square divided into five unequal compartments.

Priv. coll.

337 AEGINA, c. 350 BC Stater: 12.10 gm.

Obv. Tortoise. *Rev.* As no. 336, but bars at right angles.

Paris; *Colln de Luynes* 2145.

338 AEGINA, c. 350–320 BC Stater: 12.29 gm.

Obv. Tortoise; l. and r., *A I.* *Rev.* As no. 337, but in compartments, *NI* and dolphin.

Priv. coll.

ATHENS

The earliest coinage of Athens bears no unequivocal mark of its origin, and was, indeed, long attributed to various other cities of central Greece. Today its Athenian character is generally recognized, for the attribution is soundly based upon the evidence of types, weights, fabric and, above all, of finds. These coins, which bear a number of types (nos 339–347, 349, 350, Pls 114, 115) are usually known as *Wappenmünzen* (heraldic coins), because their types were once thought to be the badges of Athenian noble families in power from time to time; this idea is no longer widely accepted, and the types more probably have a religious significance.

Opinions upon the dates of the *Wappenmünzen* and of the earliest Athena and owl coinage (nos 351–356, Pls 116, 117), which followed them, have differed widely. The *Wappenmünzen* may have started in the second quarter of the sixth century, a date with which the shape of amphora on no. 339 (Pl. 114) is consistent, and ended about 520 BC, when the first ‘owls’ were struck; the similarity in fabric between nos 349, 350 (Pl. 115) and no. 351 (Pl. 116) is evident. This view would make most of the *Wappenmünzen* the coinage of the tyrant Pisistratus (560–527 BC) and would place the change in the reign of his son, Hippias (527–510 BC). These *Wappenmünzen* were small issues—most are extremely rare today—of local significance only, for they are rarely found far outside Attica.

Very different was the Athena and owl coinage which began about 520 BC (though another view would date it ten years later). Instead of a coinage with ever-changing types and with no clear indication of origin, the national types of Athena and her owl became fixed (except for some small denominations as no. 354), and the source of the coinage was made quite explicit by the addition of the inscription *AΘE* (nos 351–356, Pls 116, 117); at the same time, following a tendency visible elsewhere in the latter part of the sixth century, the tetradrachm, in place of the didrachm, became the standard denomination, though this had actually made its first appearance at Athens in the last *Wappenmünzen* issues (nos 349, 350, Pl. 115). This new coinage was soon being produced in such huge quantities that the high artistic level of the earlier examples shown on Pls 116, 117 could not be maintained, and many of the issues from 500–480 BC are almost barbarous in execution, though standards of weight and purity were strictly maintained.

This massive production was made possible by the intensive exploitation of the silver mines in Athens’ own territory at Laurium, which reached a climax in 483 BC, when ores of unprecedented richness were reached. Thereafter until these mines became exhausted in the first century BC they provided the Athenian state with an unfailing supply of precious metal which was one of the foundations of Athenian civilization. Athens now had far more silver than was required for home consumption, and soon after 500 BC substantial numbers of Athenian coins begin to be found far outside Attica in such areas as southern Anatolia, Syria, Egypt and Sicily, whence goods and raw materials were imported into Athens.

Emerging from the Persian wars as victor, thanks largely to the fleet which her mineral resources provided, Athens modernized her coinage and gave it a form which it was to retain with only minor stylistic modification until the end of the third century BC. Athena’s helmet was given an olive wreath as a sign of victory, and a small lunar crescent, of uncertain significance, was added behind the owl (nos 359–363, Pl. 119); the flans are now nearly always too small to include the crest of the helmet. This retention of an archaic formula meant that Athenian coinage exhibited none of the great changes which took place in the other arts during the fifth century; in fact an early fifth century tetradrachm (nos 360–361, Pl. 119) can only be distinguished from a late fifth century example (no. 363, Pl. 119) by its more careful execution. Yet this was a deliberate act of policy, for the Athenian tetradrachm very quickly became a coin respected internationally for its regular weight and purity; any change in its appearance would sow distrust and lead to a loss in popularity. The principle is exactly that which has caused the eighteenth century Maria Theresa thaler to be coined unchanged until modern times for circulation in Arabia and East Africa.

The international importance of fifth century Athenian coinage is proved by the numerous large consignments which have been found within the Persian Empire; one hoard, discovered in Egypt in 1946, contained about 10,000 pieces. The enormous economic power, which the possession of silver mines gave to Athens in the fifth century, caused a restriction of coining in those parts of the Aegean which could be dominated by her naval forces; the Athenian people even tried to achieve a monopoly of

silver coinage by banning its production by the allies of Athens, though this attempt was far from completely successful. Towards the end of the fifth century the costs of the Peloponnesian War with Sparta impoverished Athens, and in its later stages access to the mines of Laurium was interrupted. In this emergency, with her supplies of silver exhausted, from 407/6 BC Athens continued the war with a gold coinage until her final defeat in 404 BC. Early in the fourth century silver coinage on the old pattern was resumed, and lasted, though in decreasing quantity, into the third century.

In the second century a new type of coinage became popular in the Greek world; struck on thin, spread flans, the reverse types were always surrounded by a wreath (e. g. nos 609, 610, Pl. 181; nos 723–725, Pl. 201), and were therefore known as *stephanephoroi* (wreath-bearers). Coins of this type began to be minted at Athens about 196 BC, or, according to another view, some thirty years later (no. 364, Pl. 120); these so-called New Style issues were produced in great quantities, and are remarkable for the complicated system of control which their reverses exhibit (no. 365, Pl. 120). Many issues are signed by three magistrates, of whom two usually hold office for a year, while the third may change up to fourteen times in a single year; in addition there is a symbol associated with the first-named magistrate, a letter on the amphora indicating the month of issue, and further control letters below, the purpose of which is uncertain. The silver coinage of Athens probably came to an end when the city was besieged and sacked by the Roman general Sulla in 86 BC for having supported Mithradates of Pontus against Rome; another view, however, would allow the coinage to continue until about the middle of the first century BC.

Athens was the cultural centre of the Greek world, and it is hard to exaggerate the importance of her coinage. Much of the Near East was introduced to the idea of coinage by Athenian tetradrachms, the types of which are often echoed on local productions (e. g. in Lycia, nos 652–654, Pl. 190); when the Persian satrap Tissaphernes in 410 BC struck coins with which to finance Athens' enemies, he not only adopted the Athenian weight standard, but also produced a coin which at first sight looked like an Athenian tetradrachm (no. 621, Pl. 184). The Athenian weight standard was widely used, either under compulsion or for convenience, until Alexander the Great raised it to worldwide importance by making it the official standard for both gold and silver throughout his great empire. The volume of the New Style coinage, too, led to such wide circulation that its reverse type was still being copied in Arabia at the end of the first century BC.

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Plate 114

339 ATHENS, c. 570–550 BC Didrachm: 8.23 gm.
Obv. Amphora. *Rev.* (not shown). Same die as no. 340.
 London; *BMC C. Gr.*, pl. xxiv, 21. Seltman 13.

340 ATHENS, c. 570–550 BC Didrachm: 8.11 gm.
Obv. Triskeles of human legs. *Rev.* Incuse square divided diagonally (die of no. 339).

Berlin: Regling 43. Seltman 14.

Note. The fact that nos 339 and 340 are struck from the same reverse punch is good evidence that, despite their quite different obverse types, both were produced by the same mint. This also supports the view that nos 339–347 all come from a single mint rather than from a number of cities of central Greece, as used to be thought.

341 ATHENS, c. 550 BC Didrachm: 8.42 gm.
Obv. Astragalos. *Rev.* (not shown). As no. 340.
 London (BM); *PCG*, pl. 4, 27. Seltman 21.

342 ATHENS, c. 550 BC Didrachm: 8.40 gm.
Obv. Cartwheel. *Rev.* (not shown). As no. 340.
 Berlin; Regling 44. Seltman 23.

343 ATHENS, c. 540–520 BC Didrachm: 8.16 gm.
Obv. Wheel with four spokes. *Rev.* (not shown). As no. 340.
 London; *BMC C. Gr.*, pl. xx, 4 (Chalcis). Seltman 35.

344 ATHENS, c. 550–540 BC Didrachm: 8.45 gm.
Obv. Horse, bridled. *Rev.* (not shown). As no. 340.
 Berlin. Seltman 25.

345 ATHENS, c. 550–540 BC Didrachm: 8.41 gm.
Obv. Forepart of galloping horse, with bridle ornamented with discs. *Rev.* (not shown). As no. 340.
Münz. u. Med. Basel 19 (1959), 424. Seltman 27.

346 ATHENS, c. 570–550 BC Didrachm: 8.47 gm.
Obv. Owl. *Rev.* As no. 340.
Berlin; Regling 41. Seltman 68.

347 ATHENS, c. 540–520 BC Didrachm: 8.47 gm.
Obv. Bull's head, facing. *Rev.* (not shown). As no. 340.
Berlin. Seltman 70.

348 CHALCIS, c. 550 BC Stater: 16.72 gm.
Obv. Quadriga, facing, the wheels seen between each pair of horses; in chariot, Hera(?) carrying sceptre. *Rev.* (not shown). As no. 340.
London (BM); *PCG*; pl. 4, 24. Seltman 482.
Note. Seltman attributed this coin to an Athenian colony in the Thracian Chersonese. More recent opinion (Gaebler, *ZfN* 35 (1925), pp. 193ff., and Wallace, *NC* 1962, p. 36) favours Chalcis in Euboea, where the quadriga type would be an appropriate precursor of the wheel on no. 367 (Pl. 121). The similarity of fabric with nos 339–341 and 346 would be accounted for by proximity in date and place.

Plate 115

349 ATHENS, c. 530–520 BC Tetradrachm: 16.87 gm.
Obv. Gorgoneion. *Rev.* Lion's head facing; above, two pellets; all in incuse square.
Paris; *Colln de Luynes* 2035. Seltman 318.

350 ATHENS, c. 530–520 BC Tetradrachm: 16.48 gm.
Obv. As no. 349. *Rev.* Bull's head in incuse square.
London; *BMC C. Gr.*, pl. xxii, 6; *PCG*, pl. 5, 34.
Seltman 315.

Plate 116

351 ATHENS, c. 520–510 BC Tetradrachm: 16.94 gm.
Obv. Head of Athena wearing crested Attic helmet and circular ear-ring. *Rev.* Owl in incuse square; *AΘE*.
London; *PCG*, pl. 5, 35; *BMC* 26. Seltman 290.

352 ATHENS, c. 520–510 BC Tetradrachm: 17.13 gm.
Obv. As no. 351. *Rev.* (Plate 117) As no. 351, but to r., crescent.
Berlin. Seltman 289.

353 ATHENS, c. 520–510 BC Tetradrachm: 17.25 gm.
Obv. As no. 351. *Rev.* (Plate 117) As no. 351, but to l., sprig of olive.
Munich. Seltman 292.

354 ATHENS, c. 510–500 BC Triobol.
Obv. As no. 351. *Rev.* Artemis (?) with hair in queue, wearing hair-band, ear-ring and necklace; to r., sprig of olive; *AΘE*.
Athens. Seltman, p. 200.

Plate 117

355 ATHENS, c. 520–510 BC Tetradrachm: 17.24 gm.
Obv. As no. 351, but wearing necklace. *Rev.* As no. 353.
London; *BMC* 23. Seltman 303.

356 ATHENS, c. 510–500 BC Tetradrachm: 16.51 gm.
Obv. and *Rev.* as no. 355.
Berlin; Regling 182. Seltman 336.

357 ATHENS, c. 479 BC Decadrachm: 42.62 gm.

Plate XII

Obv. Head of Athena wearing necklace, ear-ring and crested Attic helmet ornamented with palmette and three olive leaves.

Plate 118

Rev. Owl facing with wings spread; to l., sprig of olive; *AΘE*.
Berlin; Regling 331. Seltman 446.

358 ATHENS, c. 479 BC Decadrachm: 43.03 gm.

Obv. and *Rev.* as no. 357.

Paris; *Colln de Luynes* 2037. Seltman 452.

Note. This was the only occasion on which a denomination as large as a decadrachm was struck at Athens. It has been explained either as a piece celebrating the defeat of the Persians, or as a result of the need to convert quickly large quantities of bullion captured from the Persians into coin.

Plate 119

359 ATHENS, c. 460 BC Tetradrachm: 17.07 gm.
Obv. As no. 357. *Rev.* Owl; to l., crescent and sprig of olive; *AΘE*.
Priv. coll.

360 ATHENS, c. 480–460 BC Tetradrachm: 17.06 gm.
Obv. and *Rev.* as no. 359.
Priv. coll.

361 ATHENS, c. 480–460 BC Tetradrachm.
Obv. and *Rev.* as no. 359.
Paris.

362 ATHENS, c. 450–440 BC Tetradrachm: 16.88 gm.
Obv. and *Rev.* as no. 359.
Priv. coll.

363 ATHENS, c. 440–430 BC Tetradrachm: 17.17 gm.
Obv. and *Rev.* as no. 359.
Priv. coll.

Plate 120

364 ATHENS, c. 191–190 BC Tetradrachm: 17.05 gm.
Obv. Head of Athena wearing triple crested Attic helmet; on the bowl, floral motif; along the brow, heads of horses. *Rev.* Owl standing on lying amphora with lid; around, olive wreath; on l., club; l. and r., monograms of magistrates Eudorus and Hippon(?); *AΘE*.
Paris; *Colln de Luynes* 2077. Thompson 24.

365 ATHENS, c. 167–166 BC Tetradrachm: 16.56 gm.
Obv. As no. 364, but also Pegasus on bowl. *Rev.* As no. 364, but magistrates *MENEΔ*, *ΕΠΙΓΕΝΟ*, *ΑΛΕΞΑ*; on l., Asclepius resting on snake entwined staff; on amphora, *K* (letter for tenth month); below, *HP* (control combination).
 London (BM); *PCG*, pl. 36, 17. Thompson 354.

366 ATHENS, c. 86–84 BC Tetradrachm: 16.78 gm.
Obv. As no. 365, but foreparts of horses over brow. *Rev.* As

no. 364, but l. and r., *MAP* and *TAM* (monograms); on amphora, *A*.

Priv. coll. Thompson, 1293.

Note. In view of the absence of the city name this can hardly be a normal Athenian issue. It was probably produced to supply Sulla's war chest after the capture of Athens in 86 BC. The monograms on the reverse can be expended *MAPKOY TAMIOY* (= quaestor), and may refer to Marcus Lucullus who was a quaestor of Sulla.

EUBOEAN

This long island lying off the north-east coast of Attica contained two important mints, Chalcis and Eretria, though from the end of the fifth century their identity, together with that of Carystus, was merged in a federal coinage in the name of the Euboean League. Both Chalcis and Eretria were important in the archaic age as mother-cities of numerous colonies both in South Italy and Sicily, and in the north Aegean. This relationship is often attested by the use of the Euboeic weight standard, and sometimes by the use of similar coin types (*e. g.* compare Eretria no. 369, Pl. 121 with Dicaea no. 392, P. 127). The earliest coinage attributable to Chalcis is struck in a fabric similar to that of the Athenian Wappenmünzen, to which it must be close in date (no. 348, Pl. 114). Near the end of the century the types were changed (no. 367, Pl. 121); the eagle alludes to the cult of Zeus (compare the contemporary coin of Elis, no. 489, Pl. 154) and the wheel may be a shorthand version of Hera's chariot on no. 348 (Pl. 114). From 506 BC Chalcis fell under the domination of Athens, though coinage appears to have continued at intervals until 470–60 BC. Eretrian coinage, likewise, mostly belongs to the latter part of the sixth century (nos 368, 369, Pl. 121), and was ended by the Persian sack during the Marathon campaign in 490 BC; the obverse type clearly recalls the name Euboea, meaning 'rich in cattle'.

During most of the fifth century, despite a revolt in 446 BC, Euboea remained subject to Athens; in 411 BC, however, after the power of Athens had been weakened by the disastrous failure of the expedition to Sicily, the Euboean cities again revolted, this time, as the coins show, with a federal organization (no. 370, Pl. 122); these circumstances also account for this single occurrence of the Aeginetan standard (used by the Peloponnesian enemies of Athens) in Euboean coinage. By 395 BC Spartan control had lapsed, and Euboea was again aligned with Athens, as another change in weight standard as well as other evidence shows (no. 371, Pl. 122). Thereafter during the fourth and third centuries the Euboean League issued a long series of drachms in its own name (no. 372, Pl. 122). In the second century, though the League organization survived into Roman imperial times, independent issues with the wreath-enclosed reverse types characteristic of the period (see p. 325) reappear for both Chalcis and Eretria (no. 373, Pl. 122).

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Plate 121

367 CHALCIS, c. 520–506 BC Tetradrachm: 16.47 gm.
Obv. Eagle flying, carrying snake. *Rev.* Wheel with five spokes; between spokes, *XAA*; all in incuse square.
 Berlin; Regling 184.
Note. An earlier issue of Chalcis is no. 348 (Pl. 114).

368 ERETRIA, c. 525–515 BC Tetradrachm: 16.95 gm.
Obv. Cow licking raised hind-leg; on its back, a swallow.
Rev. (not shown). Octopus.
 Paris; *Colln de Luynes* 2020.

369 ERETRIA, c. 525–515 BC Tetradrachm: 16.82 gm.
Obv. As no. 368, but below, *E*. *Rev.* As no. 368, but to l., *E*.
 Berlin; Regling 185.

Plate 122

370 EUBOEAN LEAGUE, 411/410 BC Stater: 12.07 gm.
Obv. Cow lying with head turned back to lick flank. *Rev.* Female head (Euboea?), wearing ear-ring; *EYB*.
 Priv. coll. Wallace 3.
Note. This unique appearance of the Aeginetan standard in Euboea dates this issue to the time of the Peloponnesian sponsored revolt from Athens.

371 EUBOEAN LEAGUE, c. 395 BC Tetradrachm: 16.47 gm.
Obv. Female head (Euboea?). *Rev.* Cow standing, head turned to front; *EYBOI*.
 Berlin; Regling 470. Wallace 18.

372 EUBOEAN LEAGUE, c. 340–338 BC Drachma: 3.67 gm.
Obv. Female head (Euboea?), wearing ear-ring. *Rev.* Cow's head turned three-quarters to front; fillets hanging from horns; to r., bunch of grapes; *EY*.
 Kricheldorf X (1962), 83. Wallace 66.

373 ERETRIA, c. 196–146 BC Tetradrachm: 16.85 gm.
Obv. Bust of Artemis wearing ear-ring and necklace; bow and quiver over r. shoulder; ΦA on hair-band. *Rev.* Cow with fillets on horns; above, *EPETPIEΩN*; below, *ΔΑΜΑΣΙΑΣ*; all in laurel wreath.
 Paris.

MACEDONIA (PRE-REGAL)

The area from which come the coins on Pls 123–126 is that lying in the north-west Aegean immediately to the east of the River Axios, and extending about as far as the island of Thasos. Down to 480 BC this area was occupied by tribes, some of whose names occur on the coins, such as the Orrescii (nos 375, 376, Pl. 123), the Bisaltae (nos 384, 385, Pl. 125), the Edoni (no. 386, Pl. 125) and the Derrones (nos 387, 388, Pl. 126). When the Persians retired in 479 BC most of the area was incorporated into the kingdom of Macedonia by Alexander I; the types of his much finer coinage (nos 556, 557, Pl. 169) are clearly derived from those of the tribal kings who had preceded him (*e. g.* nos 384, 385, Pl. 125).

The importance of this area is that it contained several rich silver mines, of which the most famous were around Mount Pangaeus, immediately to the east of the River Strymon. The local tribes soon realized that they possessed a commodity in great demand elsewhere, with which they could acquire luxury products from the more civilized communities to the south. With this in mind they struck coins in unusually high denominations, which would be convenient for export; these pieces in fact travelled far, for they have been found sometimes northwards into Bulgaria, but more often in Syria, Egypt, Mesopotamia and even Persia; a remarkable hoard found on the Syrian site of Ras Shamra contained thirty-two of these issues (though of the smaller denominations), evidently a consignment brought undispersed from the north Aegean. This idea of exporting silver in the form of coins may well have passed from this area to Athens through the medium of the Pisistratid tyrants of Athens, who had properties in the north Aegean.

The types of this area have a certain rustic strength. The satyrs and nymphs are connected with the worship of Dionysus (nos 375–379, Pl. 123), and are appropriate to an area where his cult originated; they are also related to the types of Thasos (no. 435, Pl. 140), the traders of which formed an important link with the south. The herdsman (no. 376, Pl. 123; no. 383, Pl. 124; no. 386, Pl. 125) and the huntsman (nos 384, 385, Pl. 125) are drawn from the principal occupations of these tribes; in one case (no. 387, Pl. 126), the herdsman is shown as Hermes. The Pegasus of no. 389 (Pl. 126) hints at Corinthian activity in this area (*cf.* nos 478, 479, Pl. 152).

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Plate 123

374 MACEDONIA: UNCERTAIN, c. 525–500 BC
 Tetradrachm: 16.93 gm.
Obv. Two nymphs facing each other, wearing chitons, diadems and ear-rings, raising amphora; to r., rosette. *Rev.* (not shown). Incuse square divided into four squares.
 London (BM).

375 ORRESCII, c. 520–500 BC Stater: 9.41 gm.
Obv. Bearded centaur with animal's ears carrying off nymph; above, a pellet; *OPHΕΚΙΩΝ*. *Rev.* (not shown). As no. 374.
 Berlin; Regling 198.

376 ORRESCII, c. 520–500 BC Octadrachm: 27.45 gm.
Obv. Bearded, naked warrior, wearing kausia and carrying two spears, stands between and controls two oxen; *OPPHΕΚΙΩΝ*. *Rev.* (not shown). As no. 374.
 Paris.

377 ZAIELIOI, c. 520–500 BC Stater: 9.16 gm.
Obv. As no. 375; *ZAIEAEΩN*. *Rev.* (not shown). As no. 374.
 London (BM); PCG, pl. 3, 3.

378 LETE, c. 520–500 BC Stater: 9.26 gm.
Obv. Bearded, ithyphallic satyr with horse's tail faces nymph

who raises r. hand and carries wreath; between, a pellet. *Rev.* (not shown). As no. 374.
Berlin; Regling 93.

379 LETE, c. 500–480 BC Stater: 9.60 gm.
Obv. Satyr restrains escaping nymph with r. hand and strokes her chin with l.; around, three pellets. *Rev.* (not shown).
As no. 374.
Paris; *Colln de Luynes* 1524.

Plate 124

380 AEGAE, c. 500–480 BC Stater: 9.77 gm.
Obv. Goat kneeling with head reverted; above, rosette. *Rev.* (not shown). Incuse square divided into four squares.
Priv. coll.

381 AEGAE, c. 500–480 BC Stater: 9.20 gm.
Obv. and *Rev.* (not shown). As no. 380.
Paris; *Colln de Luynes* 1530.
Note to nos 380, 381. The goat is a pun on the name of the town.

382 ICHNAE, c. 500–480 BC Stater: 9.46 gm.
Obv. Warrior, wearing crested Attic helmet, cuirass and greaves, restrains prancing horse; above and below, two pellets; *IXNAION* retrograde. *Rev.* Cartwheel in incuse square.
Berlin; Regling 202.

383 ICHNAE(?), c. 520–500 BC Octadrachm: 28.90 gm.
Obv. Herdsman naked, except for kausia, with two oxen.
Rev. As no. 382, but four-spoked wheel.
Paris.
Note. There is some doubt about the attribution of this uninscribed coin; the Edoni (*cf.* no. 386, Pl. 125) are also possible.

Plate 125

384 BISALTAE, c. 500–480 BC Octadrachm: 28.07 gm.
Obv. Young horseman, wearing kausia and carrying two spears, stands beside horse. *Rev.* (not shown). As no. 385.
Paris; *Colln de Luynes* 1736.

385 BISALTAE, c. 500–480 BC Octadrachm: 28.88 gm.
Obv. As no. 384; *BISALTATIKON* retrograde. *Rev.* Incuse square divided into four squares.
Paris.

386 EDONI, King Getas c. 500–480 BC
Octadrachm: 28.03 gm.
Obv. Herdsman, wearing kausia and carrying two goads, stands beside two oxen. *Rev.* As no. 385, but around, *ΓΕΤΑ ΒΑΣΙΛΕΥΣ ΗΛΩΝΕΩΝ*.
London (BM); *PCG*, pl. 3, 14.

Plate 126

387 DERRONES, c. 520–500 BC Dodecadrachm: 40.57 gm.
Obv. Hermes wearing kausia and carrying caduceus, conducts two oxen drawing wheeled vehicle (the wheel partly outside the circular border); *ΔΕΡΡΟΝ* retrograde. *Rev.* (not shown).
As no. 385.
Paris.
Note. The oxen are presumably drawing the kind of wheeled seat shown on no. 388.

388 DERRONES, c. 520–500 BC Dodecadrachm: 40.45 gm.
Obv. Bearded man, wearing chiton and kausia, and holding whip, sits on wheeled seat with lattice sides, drawn by two oxen; above, crested Corinthian helmet; below, flower.
Rev. Triskeles of human legs; between them, palmettes.
London (BM); *PCG*, pl. 4, 16.

389 THERMA(?), c. 520–500 BC Stater: 13.51 gm.
Obv. Pegasus, bridled, walking; below, uncertain ornament.
Rev. (not shown). As no. 385.
Brussels; *Colln Hirsch* 1005.
Note: Therma later became Thessalonica (the modern Salonika).

Plate 127

390 CALYMNA(?), c. 520 BC Stater: 10.11 gm.
Obv. Bearded male head, wearing crested Corinthian helmet.
Rev. Lyre with tortoise-shell sounding-box within a shaped incuse depression.
London (BM); *PCG*, pl. 2, 35.
Note. There is little to support the inclusion of this coin in the Macedonian region; the A, which appears on the helmet of some specimens, is more likely to designate the wearer (Ares or Achilles?) than the mint (*e. g.* Aeneia). The weight appears to be Persian (= 2 sigloi), and the attribution to Calymna itself is supported by the similar types on the signed coinage of that island from the third century BC. For the date, compare Athens nos 352, 353 (Pl. 116).

391 DICAIA (in Thrace), c. 520 BC Distater: 19.20 gm.
Obv. Head of Heracles wearing lion skin. *Rev.* (not shown).
As no. 385.
Berlin; Regling 229.

392 DICAIA (in Macedonia), c. 520–510 BC
Tetradrachm: 17.23 gm.
Obv. Cow turning head to lick hind leg; on its back, swallow and mouse; in ex., turtle. *Rev.* Octopus; *ΔΙΚΑΙΑ*.
London (BM).
Note. As a colony of Eretria, Dicaea uses the types of the mother-city, *cf.* no. 369 (Pl. 121).

CHALCIDICE

The great three-pronged peninsular which extends into the Aegean immediately to the east of Salonika was known as Chalcidice, because most of its cities were founded by Chalcidians from Euboea; Potidaea was an exception being a Corinthian colony. The area was naturally affected by Xerxes' invasion of Greece, which passed along the north coast of the Aegean, and several mints which had coined before the Persian Wars do not resume afterwards, though this may be due in part to the restrictive policies of Athens; Dicaea (no. 392, Pl. 127), Scione (no. 393, Pl. 128), Sermyle (no. 394, Pl. 128), Potidaea (no. 395, Pl. 128) and Terone (no. 401, Pl. 130) are all in this class. The most remarkable of these coins is perhaps that of Scione with the head of Protesilaus (so labelled on his helmet), who was believed to have founded the town at the time of the Trojan War.

The coinage of Acanthus (nos 397–400, Pl. 128) was of greater importance, for, beginning about 530 BC, it was resumed after the Persian Wars, and continued at intervals until the mid-fourth century; the abandonment of the Attic-Euboeic standard (as on no. 400, Pl. 129) may mark the revolt of Acanthus from Athens in 424 BC, but this and other chronological hypotheses concerning Acanthus remain very uncertain.

Mende, likewise, was active over a long period (nos 402–406, Pls XIII and 130, 131); famous for its wine, its types are related to viticulture or to the worship of Dionysus. Before the Persian Wars the god's beast, an ass, only was shown, but perhaps about 460 BC Dionysus himself, holding a wine-cup, was placed upon the back of the ass. The skilful treatment of the perspective of the reclining bodies suggests a date near 425 BC for the latest examples (nos 403–406); these types probably came to an end when Mende revolted from Athens in 423 BC. Before about 1913 these issues were almost unknown, but at that time a hoard of between three and four hundred examples was found on the site of Mende itself, so that many collections now possess numerous specimens.

Early in the Peloponnesian War some Chalcidian cities, finding themselves confronted by more powerful states such as Athens and Macedonia, formed the nucleus of a Chalcidian League with its centre at Olynthus. This organization, which expanded greatly in the fourth century minted a noble series of tetradrachms with the head of the League's patron deity, Apollo, on the obverse and his lyre on the reverse (nos 407–413, Pls 132–134); a few gold staters with the same types are also known. The League was liquidated when Philip II of Macedon captured Olynthus in 348 BC, but its importance is shown by Philip's adoption of the Apollo head for his gold coinage (nos 564, 566, Pl. 171) and of the Chalcidian League's weight standards for both his gold and his silver coinages.

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Plate 128

393 SCIONE, c. 510–500 BC Tetradrachm: 16.47 gm.
Obv. Head of the mythical founder, Protesilaus, wearing crested Attic helmet; on crest, *HPOTEEIAAΣ* retrograde.
Rev. Stern of ship in incuse square; *ΕΚΙΟ* in corners.
London (BM); *PCG*, pl. 11, 20.

394 SERMYLE, c. 500–480 BC Tetradrachm: 16.88 gm.
Obv. Bearded naked horseman carrying poised spear; at his side, a hound running; *ΣΕΡΜΥΛΙΚΟ*. *Rev.* (not shown).
Incuse divided into four squares.
Berlin; Regling 209.

395 POTIDAEA, c. 530–520 BC Tetradrachm: 16.68 gm.
Obv. Poseidon Hippios mounted, carrying trident; *ΠΟ*.
Rev. (not shown). Incuse triangle.
Hess/Leu 16. 4. 1957, 179; from the Taranto Hoard (1911).
Note. The flat fabric of this coin is quite unlike that of other coins from this mint; this may be Potidaea's earliest issue.

396 OLYNTHUS(?), c. 520 BC Stater: 17.03 gm.
Obv. Quadriga with bearded male driver, carrying whip; above, a pellet. *Rev.* Large incuse square divided diagonally; in the centre, a flying eagle in a small deeper square.
Brussels; *Colln Hirsch* 1003.
Note. The quadriga and eagle are Chalcidian types and support the attribution to Olynthus, a Chalcidian colony (*cf.* nos 348 and 367, Pls 114 and 121).

Plate 128

397 ACANTHUS, c. 530–500 BC Tetradrachm: 17.00 gm.
Obv. Lion attacking bull, which is brought to its knees; in ex., uncertain object, possibly stylized bucranium. *Rev.* (not shown). Incuse square divided into four squares.
Paris. Desneux 8.

398 ACANTHUS, c. 530–500 BC Tetradrachm: 17.37 gm.
Obv. As no. 397, but lioness with dappled hide. *Rev.* (not shown). As no. 397.
London (BM); *PCG*, pl. 3, 7. Desneux 16.

399 ACANTHUS, c. 450 BC Tetrobol: 2.64 gm.
Obv. Forepart of bull with head turned back. *Rev.* (not shown). As no. 397.
 Priv. coll.

400 ACANTHUS, c. 424–400 BC Tetradrachm: 14.15 gm.
Obv. As no. 397; in ex., *II*. *Rev.* Square, of which the four quarters are raised and granulated; around, regularly disposed, *AKANΘION*.
 Priv. coll. Cf. Desneux 122 (same *obv.* die).

Plate 130

401 TERONE, c. 500 BC Tetradrachm: 16.99 gm.
Obv. Amphora with grapes and vine leaves hung from neck. *Rev.* (not shown). Incuse square divided into four squares. Berlin: Regling 215.

402 MENDE, c. 500–480 BC Tetradrachm: 16.98 gm.
Obv. Braying, ithyphallic ass, on which stands bird pecking rump; behind, vine with leaves and cluster; *MIN*. *Rev.* (not shown). Incuse of windmill pattern, with annulet at centre. Paris. Cf. Noe 19 (same *obv.* die).

403 MENDE, c. 425 BC Tetradrachm.
Obv. Dionysus, draped below waist, wearing ivy wreath and holding thyrsus and cantharus, reclines on ass; below, ivy branch. *Rev.* On central panel, vine with four clusters; around, in sunk border, *MENΔAION*.
 Priv. coll. Noe 61.

Plate 131

404 MENDE, c. 425 BC Tetradrachm: 16.98 gm.
Obv. Dionysus, with long beard and hair loose, holding cantharus, reclines on ass; in ex., grain of barley. *Rev.* Central square contains sun with grape cluster and leaves in each corner; in sunk border, *MENΔAION*.
 Athens. Noe 87.

405 MENDE, c. 425 BC Tetradrachm: 16.89 gm.
 Plate XIII
Obv. As no. 404, but Dionysus wears wreath of ivy and looks over l. shoulder.

Plate 131
Rev. Square divided into four, the cross-bars and surround apparently studded with nails; around, *MENΔAION*.
 London (BM); PCG, pl. 10, 14. Noe 83.

406 MENDE, c. 425 BC Tetradrachm: 17.27 gm.
Obv. As no. 404, but Dionysus diademed, and in ex., *NI*.
Rev. As no. 403, but linear border round vine.
 London (BM); PCG, pl. 10, 12. Noe 93.

Plate 132

407 CHALCIDIAN LEAGUE, c. 412–410 BC
 Tetradrachm: 14.47 gm.
Obv. Head of Apollo wearing laurel wreath. *Rev.* Lyre; *ΧΑΛΚΙΔΕΩΝ*.
 Priv. coll. Cf. Robinson/Clement 18 (A16/P–).

408 CHALCIDIAN LEAGUE, c. 392–383 BC
 Tetradrachm: 14.44 gm.
Obv. and *Rev.* As no. 407.
 Hess/Leu 12. 4. 1962, 114. Robinson/Clement 71.

409 CHALCIDIAN LEAGUE, c. 395–392 BC
 Tetradrachm: 14.49 gm.
Obv. and *Rev.* As no. 407.
 Priv. coll. Robinson/Clement –.

Plate 133

410 CHALCIDIAN LEAGUE, c. 379–376 BC
 Tetradrachm: 14.45 gm.
Obv. As no. 407. *Rev.* As no. 407, but above, *KPA*, and below, *ΕΠΙ ΑΣΚΛΗΠΙΟΔΩΡΟΥ*.
 Priv. coll. Robinson/Clement 86.

411 CHALCIDIAN LEAGUE, c. 383–379 BC
 Tetradrachm: 14.35 gm.
Obv. As no. 407. *Rev.* (Plate 134) As no. 407, but above, tripod, and below, *KPA*.
 Athens. Robinson/Clement 81.

412 CHALCIDIAN LEAGUE, c. 364–361 BC
 Tetradrachm: 14.31 gm.
Obv. As no. 407. *Rev.* (Plate 134) As no. 407, but above, *ΕΠΙ ΑΡΧΙΑΜΟΥ*.
 Athens. Robinson/Clement 111.

413 CHALCIDIAN LEAGUE, c. 361–358 BC
 Tetradrachm: 14.33 gm.
Obv. As no. 407. *Rev.* As no. 407, but below, *ΕΠΙ ΟΛΥΜΠΙΟΥ*.
 Hess/Leu 24. 3. 1959, 151 Cf. Robinson/Clement 116.

AMPHIPOLIS

Lying on the River Strymon, some distance inland, Amphipolis was an important centre of communications and controlled the western approaches to the mines and timber of Mount Pangaeus; there had been more than one abortive settlement on the site before the Athenians founded in 437 BC the town which they named Amphipolis (because the Strymon flowed round both sides). Its capture by the Spartan Brasidas in 424 BC was one of Athens' most serious losses in the Peloponnesian war; although

the Athenians never abandoned their claim to the place, its independence was maintained until Philip II of Macedon captured it in 357 BC. To this independent phase belongs the remarkable series of tetradrachms with facing heads of Apollo, though none of these are much earlier than 400 BC. No. 414 (Pl. 134) with its very nearly full-face head cannot be far in date from Cimon's Arethusa at Syracuse (nos 122, 123, Pls 44, 45), while nos 415–418 (Pls 134, 135) with heads turned slightly further are later and may be compared with the work of Theodotus at Clazomenae (no. 608, Pl. 181).

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Plate 134

414 AMPHIPOLIS, c. 400 BC Tetradrachm: 14.52 gm.

Obv. Head of Apollo facing, wearing laurel wreath. *Rev.* Lighted race torch; around, on wide band, *ΑΜΦΙΠΟΛΙ-ΤΕΩΝ*.

Berlin.

Obv. As no. 414, but to r., lion. *Rev.* As no. 414, but to l., *A*. Berlin.

417 AMPHIPOLIS, c. 390–357 BC Tetradrachm: 14.21 gm.

Obv. As no. 414. *Rev.* As no. 414, but to r., tripod.

Brussels; *Colln Hirsch* 959.

415 AMPHIPOLIS, c. 390–357 BC Tetradrachm: 14.51 gm.

Obv. As no. 414. *Rev.* As no. 414, but to l., laurel wreath. Berlin: *Beschreibung* II, p. 35, no. 3.

418 AMPHIPOLIS, c. 390–357 BC Tetradrachm: 14.02 gm.

Obv. As no. 414, but to r., lion(?). *Rev.* As no. 414, but to r., *A*.

Hess/Leu 24. 3. 1959, 144.

Plate 135

416 AMPHIPOLIS, c. 390–357 BC Tetradrachm: 14.30 gm.

AENUS

The easternmost Greek city on the north Aegean coast, Aenus with its good harbour must have served as an entrepôt for the products of the Thracian hinterland. Coinage does not begin before the late 470's, when the last Persian garrison in Thrace had been liquidated. The obverse is always the head of the city's patron deity, Hermes, a wooden image of whom was believed to have been washed up on the local shore in miraculous circumstances; the god's primitive cult-statue, no doubt purporting to be the miraculous image itself, appears enthroned with a caduceus standing before it as a symbol on no. 419 (Pl. 136). This first phase of the coinage continued with more or less annual issues marked by changing symbols until about the middle of the fifth century, when it appears to have been interrupted by the operation of the Athenian Coinage Decree forbidding the allies of Athens to use silver coinage other than Athenian.

For about fifteen years the Decree seems to have been effective, for Aenus minted no coinage at all until about 435 BC, when there began a very large output of diobols lasting until about 416 BC. It has been suggested that these small coins were required to pay an Athenian garrison stationed there to protect a loyal ally from Thracian or Spartan attacks. The latter part of the fifth century saw a revival of the tetradrachm (no. 422, Pl. 137), the coins of this time being distinguished by the strongly curved edge of Hermes' petasos (nos 422, 423, Pl. 137).

For most of the first half of the fourth century the output of tetradrachms continued, but the obverse type was changed so as to show Hermes facing (no. 424, Pl. 137); no doubt some of these issues were required to support the forces of various powers contending in Thracian waters during these troubled years. The last phase of the silver coinage of Aenus ended about 341 BC, by which time the whole of Thrace had been absorbed into the kingdom of Philip II of Macedon. To this period belong some limited issues of drachmae only (no. 425, Pl. 137), which indicate a period of reduced economic activity; their reverses, however, are interesting, for they show a larger version of the enthroned cult image which had appeared already as a symbol on no. 419 (Pl. 136).

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Plate 136

419 AENUS, *c.* 455/4–453/2 BC Tetradrachm: 16.30 gm.
Obv. Head of Hermes, wearing petasos; hair in plait at back of head. *Rev.* Goat; to r., image of Hermes Perpheraios set upon a throne, on the back of which hangs a wreath; in front, a caduceus upright; *AINI*.
 Priv. coll. May 71.

420 AENUS, *c.* 455/4–453/2 BC Tetradrachm: 16.34 gm.
Obv. As no. 419. *Rev.* (not shown). As no. 419, but on arm of throne, a small goat.
 Berlin; Regling 353. May 73.

421 AENUS, *c.* 453/2–451/0 BC Tetradrachm: 16.20 gm.
Obv. As no. 419, but on petasos, *AINI*. *Rev.* Goat in linear square; to r., naked, horned Pan standing on rock; around, *ANTIAΔΑΣ*.
 Hess/Leu 7. 4. 1960, 114. May 86.

Plate 137

422 AENUS, *c.* 412/11–410/9 BC Tetradrachm: 16.71 gm.
Obv. As no. 419. *Rev.* As no. 419, but to r., caduceus.
 Priv. coll. May 255.

423 AENUS, *c.* 408/7–407/6 BC Tetrobol: 2.80 gm.
Obv. As no. 419. *Rev.* (not shown). As no. 419, but to r., crab.
 Priv. coll. May 289.

424 AENUS, *c.* 400/399–398/7 BC Tetradrachm: 15.69 gm.
Obv. Head of Hermes facing, wearing petasos. *Rev.* (not shown). Goat standing; to r., race torch; *AINION*.
 London (BM); PCG, pl. 21, 5. May 343.

425 AENUS, *c.* 357–342/1 BC Drachma: 3.93 gm.
Obv. Head of Hermes facing, wearing broad cap. *Rev.* (not shown). Image on throne (as on no. 419); to l., ear of barley; *AINION*.
 Priv. coll. May 444.

ABDERA

This important city owed its prosperity to trade with the Thracian hinterland. After the failure of an earlier settlement, it was refounded *c.* 544 BC by the people of the island of Teos (whence comes also the type of the griffin), who preferred emigration to submission to Persian rule. Growth must have been rapid, for within a few years of the foundation the regular minting of coins was started, and by 520 BC octodrachms were being minted, which, like the large coins of the Macedonian tribes (Pls 123–126), travelled far into the Persian empire (no. 426, Pl. 138). From the very beginning issues were differentiated, first by symbols and initials (no. 426, Pl. 138) and later by the full name of the issuing authority (no. 427 *obv.*, Pl. 138). Though the griffin in different attitudes always occupied the obverses, for much of the fifth and early fourth centuries the reverses showed types which changed with the names of the magistrates, and which constitute the greatest interest of the Abderite coinage. In the second quarter of the fourth century, however, the types became standardized as no. 428 (Pl. 138) with griffin and magistrate's name on obverse, and Apollo head on reverse. As at Aenus, the silver coinage of Abdera came to an end in the middle of the fourth century, when Thrace was added by Philip II to the kingdom of Macedon.

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Plate 138

426 ABDERA, *c.* 520/15–492 BC Octadrachm: 29.69 gm.
Obv. Griffin seated with forepaw raised; to l., bunch of grapes and Δ . *Rev.* (not shown). Incuse square divided into four squares.
 Berlin; Regling 106. May 37.

427 ABDERA, *c.* 473/70–449/8 BC Tetradrachm: 14.99 gm.
Obv. As no. 426, but below, tunny fish; *KAAAIAAMAS*.

Rev. Linear square divided into four squares; around, *ABΔHPITEΩN*.
 Hess/Leu. May 144.

428 ABDERA, *c.* 375/73–365/60 BC Stater: 11.09 gm.
Obv. Griffin lying, raising r. forepaw; *ΕΠΙ ΠΑΥΣΑΝΙΩ*.
Rev. Head of Apollo wearing laurel wreath; *ABΔHPITEΩN*.
 Berlin; Regling 703. May 473.

MARONEA

As far as its economic history is concerned the coinage of Maronea is closely related to that of its greater neighbour, Abdera; the reverse type, borrowed from Mende (*cf.* nos 403, 406, Pls 130, 131), refers to local production of wine, as does the head of Dionysus on no. 431 (Pl. 139).

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Plate 139

429 MARONEA, *c.* 430 BC Tetradrachm: 14.19 gm.
Obv. Horse galloping; above, wheel; *MAPQNITEΩN*. *Rev.*
Vine within square; around, *MHTPOΦΩN*.
Hess/Leu 16. 4. 1957, 154. *Cf.* West 40–42.

430 MARONEA, *c.* 430 BC Tetradrachm: 14.16 gm.
Obv. As no. 429, but above, cantharus; *MAPΩN*. *Rev.* As no.

429, but around, *ΕΠΙ ΜΗΤΡΟΔΟΤΟ*.
Berlin; Regling 488. West 6.

431 MARONEA, *c.* 400 BC Tetradrachm: 16.74 gm.
Obv. Head of young Dionysus, wearing ivy wreath. *Rev.*
As no. 429, but around, *MAPQNITΩN ΕΠΙ ΜΗΤΡΟΔΩΡΟ*.
Hess/Leu 24. 3. 1959, 131. West 73.

THRACIAN CHERSONESE

What is now the Gallipoli peninsula was ruled from the mid-sixth century by the Athenian family of the Philaids, to whom the head of Athena refers (no. 432, Pl. 140); the lion on the obverse is a Milesian type, recalling the Milesian origin of Cardia, the capital of the district. No. 432 was minted during the reign of the younger Miltiades, who was compelled to leave the Chersonese and seek refuge in Athens in 493 BC after supporting the unsuccessful Ionian Revolt.

Plate 140

432 THRACIAN CHERSONESE, *c.* 500 BC
Tetradrachm: 16.73 gm.
Obv. Lion standing, raising l. forepaw and turning back head.

Rev. Head of Athena wearing crested Attic helmet and circular ear-ring; all in incuse square.
Berlin; Regling 230.
Note. Some specimens are inscribed *XEP* on reverse.

NEAPOLIS DATENON

The modern Kavala on the mainland opposite Thasos, from which it may have been founded. Lying at the foot of Mount Pangaeus, it may have possessed its own silver mine. The coinage belongs to the early fifth century (no. 433, Pl. 140) and to the fourth (no. 434, Pl. 140). During the intervening period Neapolis was tributary to Athens and struck no coins.

Plate 140

433 NEAPOLIS DATENON, *c.* 500–480 BC Stater: 9.88 gm.
Obv. Gorgoneion. *Rev.* (not shown). Incuse square divided into four squares.
Priv. coll.

434 NEAPOLIS DATENON, *c.* 400–350 BC Drachma: 3.82 gm.
Obv. Gorgoneion. *Rev.* Head of Artemis wearing laurel wreath; *NEOΠ*.
Priv. coll.

THASOS

Settled from Paros, this island not only possessed mines of precious metal, but had an important trade in wine as well. Its considerable archaic coinage starts soon after the middle of the sixth century with satyr and nymph types similar to some that were used by the Macedonian tribes (as nos 375–379, Pl. 123); like them, too, they are often found in hoards from the Persian Empire. This coinage probably continued, with stylistic development (no. 436, Pl. XIV), until about 450 BC. Thereafter there is a

long gap without coinage (due to the Athenian ban on coining by her allies). The same types were revived for a short time in a fully classical style (no. 437, Pl. 141), probably when Thasos revolted from Athens in 411 BC. In the fourth century Thasos changed to the now popular 'Rhodian' standard, and adopted new types (no. 439, Pl. 141), though still paying tribute to the patron deity of her wine trade, Dionysus.

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Plate 140

435 THASOS, c. 520 BC Stater.

Obv. Ithyphallic satyr carrying nymph, who raises r. arm.

Rev. (not shown). Incuse square.

Berlin.

Note. Perhaps this coin dates only from the revolt from Athens in 411 BC.

438 THASOS, c. 375–350 BC Trihemionbol: 0.88 gm.

Obv. Kneeling satyr holding cantharus. *Rev.* Crater; ΘΑΣΙΩΝ. Priv. coll.

Plate XIV

436 THASOS, c. 465–450 BC Stater: 8.83 gm.

Obv. and *Rev.* (not shown). As no. 435, but later style.

H. A. Römer Coll.; Schwarz/Mildenberg, *Aus einer Sammlung griechischer Münzen*, no. 14, Zürich 1961.

439 THASOS, c. 370–350 BC Tetradrachm: 15.26 gm.

Obv. Head of Dionysus wearing wreath of ivy. *Rev.* Linear square enclosing Heracles kneeling and shooting with bow; he wears lion scalp and his club rests against his knee; to r., lion's head facing; ΘΑΣΙΩΝ.

Berlin; Regling 486; *Beschreibung* I, p. 287, 9.

West 33.

Plate 141

437 THASOS, c. 420–410 BC Stater.

Obv. Bearded satyr, with animal's ears and horse's tail, carries nymph; to r., A. *Rev.* (not shown). As no. 435.

Athens.

THE BLACK SEA

Of the many Milesian colonies in this area Panticapaeum in the Crimea was one of the most flourishing. The remarkable gold coinage (nos 440–442, Pls XV and 142), which does not begin before c. 350 BC, is a testimony not only to the prosperity of the city, but also to the strength of Greek civilization in this remote area. The head of Pan on the obverse is a pun on the city's name, and the griffin is the fabulous monster which was reputed to guard the distant sources of gold in the Ural or Altai Mountains—the same gold as that with which the Scythian burials of south Russia were so lavishly furnished. Beneath the griffin's feet is the corn exported in such quantity from the Ukraine to the cities of the Aegean.

This sea-borne trade in corn had to pass through the Bosphorus, on either side of which lay Byzantium, later Constantinople (no. 443, Pl. 142), and Calchedon (no. 444, Pl. 142); both colonies of Megara. Close relations were maintained between these two cities, as is here illustrated by a monetary convention of the late third century. The choice of Demeter for the obverse was appropriate in view of the profit brought to both cities by the corn trade passing through the Bosphorus.

Plate 142

440 PANTICAPAEUM, c. 320–300 BC Gold stater: 9.10 gm.

Obv. Head of Pan, wearing wreath of ivy. *Rev.* Horned griffin, head facing, holding spear in jaws, and standing on stalk of barley; ΠΑΝ.

Hess/Leu 16. 4. 1957, 149.

441 PANTICAPAEUM, c. 350–335 BC Gold stater.

Obv. and *Rev.* As no. 440.

Athens.

Plate 142

443 BYZANTIUM, c. 230–220 BC Tetradrachm: 13.35 gm.

Obv. Head of Demeter, veiled, wearing stalk of barley in hair. *Rev.* Poseidon seated on rock, holding stern of ship in r. hand and trident over l. shoulder in l. hand; below, ΕΠΙ ΜΕΝΙΣΚΟΥ; to r., monogram and Ϛ (= B).

London (BM); PCG, pl. 35, 1.

444. CALCHEDON, c. 230–220 BC Tetradrachm: 13.97 gm.

Obv. As no. 443. *Rev.* Apollo, holding bow and arrow, seated on omphalos; on l., ΜΕ (monogram); on r., ΔΙ; below, ΚΑΛΧ.

London (BM); PCG, pl. 34, 31.

Plate XV

442 PANTICAPAEUM, c. 350 BC Gold stater: 9.09 gm.

Obv. Head of Pan facing. *Rev.* (not shown). As no. 440.

Berlin; Regling 753.

PEPARETHOS: CORCYRA

An island off Thessaly, Peparethos was well known for its wine, which accounts for the bunch of grapes on the obverse of a group of tetradrachms struck before and after 500 BC. It is remarkable that this minor coinage from a unimportant mint should include one of the most delightful and vivacious of all archaic Greek coin types—a young winged god, perhaps one of the winds (no. 446, Pl. XVI).

Corcyra (the modern Corfu) was a much more important mint, for the island was the natural starting point of the route to South Italy and Sicily and of that running up the Adriatic. The original settlers came from Euboea, but these were replaced in the late eighth century by Corinthians, though relations with Corinth thereafter were by no means always friendly. The coinage, however, appears to owe nothing to Euboea (except perhaps the cow and calf obverse) or to Corinth. The earliest coins of Corcyra, which are of the late sixth century, have two stellate patterns on the reverse deeply sunk in two adjoining rectangles, a type of reverse found otherwise only in south-west Asia Minor (*e. g.* Camirus, no. 643, Pl. 188) or Ionia. On later issues the stellate patterns were incorporated into a flat circular design (no. 448, Pl. 143). From the late third century Corcyra under Roman rule produced a very large coinage still bearing the traditional types, but struck on the standard of the Roman victoriante.

Plate 143

445 PEPARETHOS, *c.* 520–510 BC Tetradrachm: 17.07 gm.
Obv. Bunch of grapes flanked by two vine leaves. *Rev.* Incuse square, within which young man riding dolphin.
Hess/Leu 16. 4. 1957, 201; from the Taranto hoard (1911).

446 PEPARETHOS, *c.* 500–480 BC Tetradrachm: 16.91 gm.
Obv. Bunch of grapes.

Plate XVI

Rev. Young winged male figure running; his feet also are winged, and he carries a beaded diadem in each hand; all within an incuse square with dotted border.
London (BM); *PCG*, pl. 4, 18.

Plate 143

447 PEPARETHOS, *c.* 500–480 BC Tetradrachm: 17.17 gm.
Obv. (not shown). Same die as no. 446. *Rev.* Head of Heracles wearing lion skin, within incuse square with dotted border.
London (BM); *PCG*, pl. 4, 20.

Note to nos 445–447. The attribution of this group depends on one specimen signed *IIE* (*PCG*, pl. 4, 19), and on some find evidence (Wroth, *JHS* 1907, pp. 90ff.).

448 CORCYRA, *c.* 400–375 BC Stater.

Obv. Cow suckling calf. *Rev.* Square enclosing double stellate pattern; around, *KOP* and Θ ; all within circular incuse.
Athens.

BOEOTIA

The Boeotians, lying on the northern frontier of Attica, were a federation of nominally independent cities under the leadership of Thebes. This unity was expressed by the common use of a distinctive type of shield upon the obverses of their coins irrespective of the mint of issue; the choice of this emblem is apparently due to the fact that this kind of shield was made from ox-hide, so that its use constituted a pun on the name Boeotian, which contained an element derived from the Greek word for an ox (*βοῦς*), at least according to ancient etymology. The reverses of the coins bore types appropriate to the issuing city; in some periods, as during the second half of the fifth century, when the threat of Athenian aggression made Thebes undisputed leader of Boeotia, only Theban types appear (nos 451–458, Pls 114, 145). At other times when Thebes was in decline, the types and names of other Boeotian cities become prominent. For example, after the ill-advised Medism of Thebes in the Persian wars, Tanagra for a time struck coins in her own name. Again in the early fourth century, when Thebes was dominated by Sparta, separatist coinages appeared in the names of Haliartus (no. 460, Pl. 146) and other Boeotian towns. By the defeat of Sparta at the battle of Leuctra in 371 BC Theban supremacy was established not only over Boeotia, but also over most of mainland Greece. To the next forty years belong the long series of Theban coins with a crater and a personal name on reverse (no. 459, Pl. 145); the status of the persons named is still uncertain. The political power of Thebes ended in 338 BC, when Boeotia was conquered by Philip II of Macedon.

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Plate 144

449 ACRAEPHIA, c. 450 BC Stater: 12.16 gm.
Obv. Boeotian shield. *Rev.* Cantharus; above, laurel leaf; *AK*.
 Berlin; Regling 335.

450 THEBES, c. 446–426 BC Stater: 11.99 gm.
Obv. (not shown). As no. 449. *Rev.* Heracles carrying club and bow; *ΘEB*.
 London (BM); *PCG*, pl. 11, 28; *BMC* 29.

451 THEBES, c. 446–426 BC Stater: 12.02 gm.
Obv. (not shown). As no. 449. *Rev.* Female figure seated, with feet on footstool, holding crested Corinthian helmet; *ΘEBA*.
 London (BM); *PCG*, pl. 11, 26; *BMC* 42.

452 THEBES, c. 446–426 BC Stater: 12.18 gm.
Obv. (not shown). As no. 449. *Rev.* Heracles kneeling to string bow by bracing it under l., thigh; *ΘEBAIOΣ*.
 London (BM); *PCG*, pl. 11, 27; *BMC* 30.

453 THEBES, c. 446–426 BC Stater: 11.85 gm.
Obv. Boeotian shield. *Rev.* Heracles standing strings bow; to l., club; *HEBA ΘEBAIOΣ*.
 Berlin.

Plate 145

454 THEBES, c. 446–426 BC Stater: 12.17 gm.
Obv. (not shown). As no. 453. *Rev.* The child Heracles strangling two snakes; *ΘEBAIOΣ*.
 Paris; *Colln de Luynes* 1996.
Note. For this reverse type compare Croton no. 271 (Pl. 94), Samos no. 616 (Pl. 183) and Cyzicus no. 720 (Pl. 200).

455. THEBES, c. 410–400 BC Stater: 12.02 gm.
Obv. (not shown). As no. 453. *Rev.* Head of Heracles facing, wearing lion skin; *ΘE*.
 Berlin; Regling 469.

456 THEBES, c. 410–400 BC Stater: 12.32 gm.
Obv. (not shown). As no. 453. *Rev.* Head of Dionysus, wearing wreath of ivy; *ΘE*.
 London (BM); *PCG*², pl. 51, 15; *BMC* 54.

457 THEBES, c. 410–400 BC Stater: 12.18 gm.
Obv. (not shown). As no. 453. *Rev.* Head of Dionysus facing, wearing ivy wreath; *ΘE*.
 London (BM); *PCG*, pl. 23, 35; *BMC* 104.

458 THEBES, c. 410–400 BC Stater: 11.93 gm.
Obv. Boeotian shield, upon which a club. *Rev.* As no. 456. Priv. coll.
Note. The date of nos 455–458 is indicated by the fact that coins of this type were found in conjunction with no. 370 of Euboea (Pl. 122) in a hoard from Euboea buried c. 400 BC (Wallace, *NNM* 134, pp. 49ff.).

459 THEBES, c. 350–338 BC Stater: 12.18 gm.
Obv. (not shown). As no. 453. *Rev.* Crater; above, a rose; *ΕΠΑΜΙ* cut over *ΕΠΙΠΑ*.
 London (BM); *PCG*, pl. 23, 32.
Note. It is unlikely that the name on this coin refers to the famous Epaminondas, who died in 362 BC. The very large Myron Hoard (Noe 718), buried about the middle of the century, contained no examples of no. 459, so that these were probably issued after the date of burial, and thus cannot relate to the famous Epaminondas.

Plate 146

460 HALIARTUS, c. 387–374 BC Stater: 11.92 gm.
Obv. Boeotian shield, on which, trident. *Rev.* Poseidon thrusting with trident; *ΑΠΙΑΡΤΙΟΣ*.
 Berlin; Regling 680.
Note. After the Peace of Antalcidas in 387 BC Theban control of Boeotia was weakened, and cities, such as Haliartus, Orchomenus, Tanagra and Thespieae struck staters in their own names.

PHOCIS LOCRI

The Phocians on the north coast of the Gulf of Corinth, adjoining Boeotia, were a federation, much of the history of which revolves round control of the oracle of Apollo at Delphi. The coinage of Phocis, which began towards the end of the sixth century, consisted of small denominations only (no. 464, Pl. 147), and was never of more than local importance.

Delphi, or rather the Amphictionic Council which governed the sanctuary, occasionally struck larger coins. One such issue soon after the Persian wars shows two rams' heads which may be the terminal ornaments of gold or silver drinking horns (*rhyta*) (no. 461, Pl. 146); such vessels were of Persian origin and became common in Greece only after the Persian wars. The choice of this type may have been occasioned by the dedication of such vessels at Delphi from the Persian spoils captured at Plataea (Hoffmann, *Antike Kunst* 1961, pp. 21ff.).

Another remarkable issue was struck in 336 BC (nos 462, 463, Pl. 147), when it was decided to convert the miscellaneous coins which had accumulated in the Delphic treasury into a new issue. Considerable fragments of the record of this operation have survived inscribed on stone. The new coinage was issued in the name of the Amphictionic Council (*ἀμφικτιόνες* = 'dwellers round about').

To the north of the Phocians the Locrians occupied a restricted and mountainous territory; though of little political importance they produced a fine coinage for a time in the mid-fourth century (no. 465, Pl. 148). The obverse is a head of Persephone

so closely copied from that of Euaenetus at Syracuse (nos 104–106, Pls 34–36) that some have suggested that the dies were made there; the reverse is Ajax, son of Oileus, Locrian king at the time of the Trojan War.

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Plate 146

461 DELPHI, c. 479–470 BC Tridrachm: 17.90 gm.

Obv. Two rams' heads side by side; above, two dolphins; ΔΑΔΙΚΩΝ. *Rev.* Four deeply sunk squares resembling the coffers of a ceiling; within each, a dolphin and a palmette in one corner.

Paris.

Note. The dolphins are a pun on the name Delphi. The squares of the reverse are probably simply an elaboration of the archaic incuse square.

Plate 147

462 DELPHI, c. 336 BC Stater: 12.28 gm.

Obv. Head of Demeter, veiled, wearing stalk of barley in hair.

Rev. Apollo seated on omphalos covered with knotted woollen net; he holds laurel sapling and rests r. elbow on large lyre; to l., tripod; ΑΜΦΙΚΤΙΟΝΩΝ.

Athens.

463 DELPHI, 336 BC Stater: 12.19 gm.

Obv. and *Rev.* (not shown). As no. 462.

Priv. coll.

464 PHOCIS, c. 480 BC Triobol: 2.67 gm.

Obv. Head of bull facing. *Rev.* Female head within incuse square.

Priv. coll.

Plate 148

465 LOCRI OPUNTII, c. 350 BC Stater: 11.77 gm.

Obv. Head of Persephone wearing reed in her hair, pendent ear-ring and necklace. *Rev.* Ajax, son of Oileus, wearing crested Corinthian helmet, and carrying a shield decorated with a griffin, and a short sword, advances to battle; on the ground, an enemy's spear; between his legs, ΑΙΑΣ; ΟΠΟΝΤΙΩΝ.

London (BM); *PCG*, pl. 22, 29; *BMC* 33.

THESSALY

Thessaly differs from most of the rest of Greece in that it consists of plains surrounded by mountains which cut it off from the sea and from its neighbours alike; its economy, too, differed from the normal Greek pattern, for the plains produced cereals rather than olives and vines, and also provided pasture for horses and cattle. The Thessalian cities formed a loose federation and were governed by narrow oligarchies of noble families, from among whom was elected a chief magistrate for life (*tagos*) to perform the functions of president and commander-in-chief.

Larissa, under the powerful family of the Aleuadae, was for long the principal town; throughout the fifth century its coinage was stamped with what were virtually federal types (no. 466, Pl. 148), which were copied at several other towns. Both the bull and the horse recall the herds of the Thessalian plains (the local cavalry was famous), but both animals are also connected with the cult of Poseidon; the horse was believed to be one of his gifts to mankind, and the strength of the bull expressed the rushing violence of a stormy sea. A kind of bull-fight (no. 466 *obv.*, Pl. 148) was performed at festivals of Poseidon.

For the first half of the fourth century Larissa was eclipsed by Pherae, under the government first of Jason, 380–370 BC, and then of his nephew, Alexander, 369–358 BC (no. 471, Pl. 149), but the internal strife caused by these rulers made Thessaly an easy prey to Philip II of Macedon, who changed the name of Gomphi to Philippopolis (no. 470, Pl. 149) and made it a Macedonian stronghold.

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Plate 148

466 LARISSA, c. 430–400 BC Drachma: 6.18 gm.

Obv. Young man, naked but for chlamys, grasps galloping bull by the horns. *Rev.* Horse galloping with bridle loose; ΑΛΙΣΑΙΑ.

Berlin. Herrmann III, h.

467 LARISSA, c. 400 BC Drachma: 6.12 gm.

Obv. Head of nymph, Larissa, wearing ampyx and sphendone.

Rev. As no. 466.

Berlin. Herrmann IV, c.

468 LARISSA, c. 350 BC Drachma: 6.06 gm.
Obv. Head of nymph. Larissa, facing. *Rev.* Horse grazing;
ΛΑΡΙΣΑΙΩΝ.
 Priv. coll. Herrmann VII, m.
Note. The obverse is derived from Cimon's facing Arethusa
 at Syracuse, nos 122, 123 (Pls 44, 45).

Plate 149

469 LAMIA, c. 375 BC Hemidrachm: 2.84 gm.
Obv. Head of young Dionysus, wearing ivy wreath. *Rev.*
 Crater; above, ivy leaf; to r., jug; *ΛΑΜΙΕΩΝ*.
 Priv. coll.

470 GOMPHI-PHILIPPOLIS, c. 350–340 BC
 Stater: 11.85 gm.
Obv. Head of Hera (?) facing, wearing crown with fillets

hanging on each side. *Rev.* Zeus seated on rock, holding
 sceptre; to l., thunderbolt; *ΦΙΛΙΠΠΟΠΟΛΙΤΩΝ*.
 London (BM); *PCG*, pl. 22, 23; *BMC* 1.
Note. Gomphi was renamed Philippopolis by Philip II of
 Macedon, 359–336 BC.

471 PHERAE, Alexander, 369–358 BC Stater: 11.86 gm.
Obv. Head of Artemis-Hecate facing; to l., torch. *Rev.* Armed
 horseman (Alexander) carrying spear; on rump of horse,
 double axe as brand-mark; below, double axe; *ΑΛΕΞ-
 ΑΝΔΡΟΥ*.
 London (BM); *PCG*, pl. 22, 26; *BMC* 14.
Note. The double axe may have been the personal device of
 Alexander, who is said to have paid special worship to
 Dionysus of Pagasae, surnamed *Πέλεκυς* (= axe).

EPIRUS

This backward area of north-west Greece emerged into history only when the military services of its rulers were invoked to protect more civilized communities; thus the coinages of Alexander (no. 328, Pls XI and 109) and Pyrrhus (nos 472–476, Pls 150, 151) have an unexpected brilliance and sophistication, which is explained by their production in the established mints of South Italy and Sicily, whither these rulers had been invited to champion the Greek cities against the native tribes; the bullion was certainly provided by the Greek cities to pay for these mercenary troops. Pyrrhus claimed descent from Pyrrhus, son of Achilles, and this no doubt explains the appearance of both Achilles and his mother, Thetis, on his didrachm (no. 473, Pl. 150), though both the claim and the types also have a basis in contemporary propaganda; Pyrrhus' war against Rome was a revival of the Trojan War with himself, the descendant of Achilles, on one side, and the Romans, descended from the Trojan Aeneas, on the other. His Syracusan types (nos 474–476, Pl. 151) are mostly derived from the coinages of Agathocles. One Epirote feature, common to the coins of both Alexander and Pyrrhus, is the head of Zeus of Dodona (where there was a famous oracle), who wears an oak wreath instead of the usual laurel (no. 318, Pl. XI; no. 472, Pl. 150; cf. no. 477, Pl. 151).

In Epirus itself the kings struck no coinage in their own names; here there was at times a federal coinage, again showing Zeus of Dodona (no. 477, Pl. 151).

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Plate 150

472 EPIRUS, Pyrrhus, 297–272 BC Tetradrachm: 16.61 gm.
Obv. Head of Zeus of Dodona, wearing oak wreath; below,
ΘΕΣ (monogram). *Rev.* Dione, wife of Zeus of Dodona,
 wearing polos and holding sceptre, sits on throne and raises
 veil with l. hand; in ex., *Α*; *ΒΑΣΙΛΕΩΣ ΠΥΡΡΟΥ*.
 Paris; *Colln de Luynes* 1898.
Note. Probably struck during his Italian campaign, 279–
 274 BC, at Locri in South Italy (cf. no 293, Pl. 101).

473 EPIRUS, Pyrrhus, 297–272 BC Didrachm: 8.39 gm.
Obv. Head of Achilles wearing crested helmet with griffin on
 bowl; below, *Α*. *Rev.* Thetis, mother of Achilles, veiled,
 riding on hippocamp and holding shield embossed with
 gorgon head; *ΒΑΣΙΛΕΩΣ ΠΥΡΡΟΥ*.
 Berlin; *Regling* 846.

Note. Perhaps struck during his Italian campaign 279–274 BC,
 at Locri in South Italy.

Plate 151

474 EPIRUS, Pyrrhus, 297–272 BC Gold stater: 8.60 gm.
Obv. Head of Athena wearing crested Corinthian helmet
 with griffin on bowl, ear-ring and necklace; hair loose on
 neck; to l., owl facing. *Rev.* Nike carrying trophy and oak
 wreath; to l., bucranium; *ΒΑΣΙΛΕΩΣ ΠΥΡΡΟΥ*.
 Hess/Leu 12. 4. 1962, 207.
Note. Struck at Syracuse 278–276 BC.

475 EPIRUS, Pyrrhus, 297–272 BC
 5-nummus piece: 5.57 gm.
Obv. Head of Persephone wearing stalk of barley in hair;
 to l., forepart of Pegasus. *Rev.* Athena, in fighting attitude,

carrying shield and spear; to l., thunderbolt; to r., *E*; *ΒΑΣΙΛΕΩΣ ΠΥΡΡΟΥ*.

London (BM); *SNG* II, 1531.

Note. Struck at Syracuse 278–276 BC; the head is derived from the tetradrachms of Agathocles (nos 135, 136, Pl. 48) whose daughter Pyrrhus married. The denomination is puzzling, and for want of a better name, I have adopted that of Giesecke, *Sicilia Numismatica*, p. 107.

476 EPIRUS, Pyrrhus, 297–272 BC Gold half-stater: 4.21 gm.
Obv. Head of Artemis; over r. shoulder, quiver; to r.,

lighted torch. *Rev.* (not shown). As no. 474, but in field star and thunderbolt; *ΒΑΣΙΛΕΩΣ ΠΥΡΡΟΥ*.

London (BM); *PCG*, pl. 37, 16.

Note. Struck at Syracuse, 278–276 BC.

477 EPIRUS, Federal issue, c. 230–220 BC

Didrachm: 9.98 gm.

Obv. Heads of Zeus of Dodona wearing oak wreath, and of Dione wearing stephanos; to l. *ME* (monogram). *Rev.* Butting bull within oak wreath; *ΑΠΕΙΠΩΤΑΝ*.

London (BM); *PCG*, pl. 35, 10; *BMC* 10. Franke, p. 161, 2.

Note. Cf. no. 807, Pl. 220 for a Hellenistic prototype for this doubled-headed obverse.

PELOPONNESE

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CORINTH

Situated by the narrow isthmus connecting the Peloponnese with the mainland of Greece, Corinth was in a unique position for maintaining relations both to east and west by sea, and to north and south by land; these relations are attested from the eighth century onwards by the wide distribution of Corinthian pottery, and from about 600 BC were facilitated by a kind of slipway whereby boats could be drawn across the Isthmus of Corinth. In the eighth century Corinth founded colonies at Syracuse and Corcyra, and in the seventh century a number more in north-west Greece, such as Leucas and Ambracia; the colonies of this latter group long remained far more dependent on their mother-city than was usual in the Greek world. A governing oligarchy of inter-related families was expelled c. 655 BC by one Cypselus who established himself as absolute ruler; under him and his son, Periander, Corinth was raised to new prosperity and to the status of an international power, until an oligarchy once again resumed control c. 583 BC.

The earliest coinage of Corinth was long attributed to either Cypselus or Periander, but such early dates are no longer tenable; more probably it began in the second quarter of the sixth century, some time after that of Aegina, and about the same time as the first Wappenmünzen of Athens (see p. 324). All Corinthian coins bear upon their obverses the winged horse, Pegasus, which Bellerophon (no. 486, Pl. 153) was believed to have tamed at Corinth with the help of Athena, whose head appears on the reverses from about 515 onwards (nos 480ff., Pls 152, 153); occasionally the Chimaera, a monster slain by Bellerophon, is found on the reverse (no. 486, Pl. 153). Inscription is usually confined to the archaic letter, *koppa*, the initial of Corinth, which survived as part of the type long after it had become obsolete in normal script; some later issues also carry abbreviated personal names (nos 487, 488, Pl. 153).

Though the basic formula of Pegasus on obverse and Athena head on reverse remained unaltered from the late sixth century until the end of the fourth, there was much development in detail. From about 450–430 BC the archaic Athena head with hair in long queue (nos 480–482, Pl. 152) was becoming obsolete; early classical heads sometimes have short hair (no. 483, Pl. 153), and fully classical heads are given long waving locks (no. 484, Pl. 153). At the same time the old curled wing of Pegasus (no. 480, Pl. 152) began to be abandoned in favour of the pointed wing normal in the fourth century (nos 485–488, Pl. 153).

The Peloponnesian War seems to have interrupted the coinage of Corinth, for very little is available for attribution to the last three decades of the fifth century. When coinage was resumed early in the fourth century, there are several new features; the head of Athena is normally accompanied by an issue-mark (no. 485, Pl. 153); she now wears a leather neck-flap beneath her helmet (no. 485, Pl. 153); and the old square-headed reverse is soon replaced by a circular die. Output was considerable throughout the first half of the fourth century, but soon after 350 BC it was enormously increased, and at the same time the administration of the mint seems to have been re-organized (nos 487, 488, Pl. 153). These changes appear to be connected with the revival of the Greek cities of Sicily brought about by Timoleon, for the coins of this period were exported in enormous numbers to Sicily, where they formed the bulk of the local currency (see p. 280).

It was noted above that some Corinthian colonies remained unusually dependent upon her; this dependence is well exemplified in the field of coinage, for the colonial coinages differ from those of Corinth only in the replacement of the *koppa* by an initial appropriate to the issuing mint (*e. g.* *Λ* for Leucas, *Α* for Ambracia). In the fourth century this practice spread widely both in north-west Greece, and in South Italy and Sicily (*e. g.* Syracuse, no. 132, Pl. 47). Apart from a few scattered later issues, coinages of this type seem to have lapsed with that of Corinth at the end of the fourth century.

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Plate 152

478 CORINTH, *c.* 550 BC Stater: 8.25 gm.
Obv. Pegasus; below, *ρ*. *Rev.* Incuse square divided into eight triangles.
 Berlin. Ravel 12.

479 CORINTH, *c.* 540–520 BC Stater: 8.55 gm.
Obv. Pegasus flying; below, *ρ*. *Rev.* Incuse of swastika shape.
 Priv. coll. Ravel Per. I, class 2.

480 CORINTH, *c.* 515–500 BC Stater: 7.57 gm.
Obv. As no. 479. *Rev.* Head of Athena wearing Corinthian helmet, within incuse square with linear border.
 Berlin. Ravel 102.
Note. The low weight suggests that this coin is plated, and is, therefore, an ancient forgery.

481 CORINTH, *c.* 515–500 BC Stater: 8.66 gm.
Obv. (not shown) and *Rev.* As no. 480.
 London (BM). Ravel 97.

482 CORINTH, *c.* 470–450 BC Stater: 8.67 gm.
Obv. (not shown). As no. 479. *Rev.* As no. 480, but no linear border.
 London (BM); *BMC* 64. Ravel 222.

Plate 153

483 CORINTH, *c.* 450–440 BC Stater: 8.53 gm.
Obv. (not shown). As no. 479. *Rev.* As no. 482, but hair short.
 Berlin; Regling 329. Ravel 303.

484 CORINTH, *c.* 440–430 BC Stater: 8.59 gm.
Obv. (not shown). As no. 479, but wings pointed. *Rev.* As no. 482, but hair loose; to l., trident.
 London (BM). Ravel 314.

485 CORINTH, *c.* 420–400 BC Stater: 8.58 gm.
Obv. As no. 484. *Rev.* Head of Athena wearing Corinthian helmet with neck-flap; to r., palmette.
 Priv. coll. Ravel 325.
Note. The date of this coin is hard to fix. It is certainly transitional between the main fifth and fourth century series. The pointed wing of Pegasus, the neck-flap and the symbol look to the fourth century, yet the incuse square, otherwise absent in the fourth century, has not been discarded.

486 CORINTH, *c.* 350 BC Trihemidrachm: 4.22 gm.
Obv. Bellerophon on Pegasus poised spear for thrust; below, *ρ*. *Rev.* Chimaera (lion joined with forepart of goat and snake tail); the goat protome straddles the lion's back with head turned to front; it is not quite clear whether the lion is breaking a spear which has pierced the throat of the goat, or whether the two heads are combining to break the spear.
 Berlin; Regling 676.
Note. Here obverse and reverse form a single scene showing the hunter and the hunted. For the Chimaera, *cf.* Sicyon, no. 510 (Pl. 159).

487 CORINTH, *c.* 325–308 BC Stater: 8.48 gm.
Obv. As no. 485. *Rev.* As no. 485, but laurel wreath on helmet; to r., boar; l. and r., *ΑΡ*.
 Priv. coll. Ravel 1017.

488 CORINTH, *c.* 340–325 BC Stater: 8.52 gm.
Obv. (not shown). As no. 485. *Rev.* As no. 485, but to r., head of Helios facing; below, *Λ*.
 Priv. coll. Ravel 1006.

ELIS

Once every four years representatives from all parts of the Greek world would meet at Olympia in the territory of Elis to celebrate games in honour of Olympian Zeus; these games were performed in a sacred area which contained temples of Zeus and Hera, as well as many monuments of victors, and administrative buildings. The temple of Zeus contained one of the great sculptural masterpieces of the ancient world, the seated gold and ivory statue of the god by Pheidias (created c. 430 BC), the head of which forms the obverse of a near contemporary coin (no. 499, Pl. 156).

The splendid coinage of Elis, nearly all in large denominations, is clearly to be closely associated with these periodic festivals. Nike (here Victory in the games) is prominent on the late sixth and fifth century coinages (nos 490, 491, Pl. 154; nos 494–496, Pl. 155; no. 498, Pl. 156); the eagle and the thunderbolt of Zeus are constant features; and on one coin (no. 495, Pl. 155) the pre-Pheidian cult-statue of a thundering Zeus is shown. From the late fifth century onwards a second mint was established in connexion with the temple of Hera (nos 507, 508, Pl. 158). The fourth century school of Eleian engravers influenced coin-types in many parts of Greece; artists trained at Elis may have travelled to other mints to produce works such as the heads of Zeus on the coinages of the Arcadian League (nos 512, 513, Pl. 159) and of Philip II of Macedon (no. 567, Pl. 177), and those of Hera at Argos (nos 517, 518, Pl. 161) and Cnossus (no. 544, Pl. 165).

The themes of the coinage of Elis were dictated by the cults which it served, but within these limits there was, until the middle of the fourth century, a constant striving after novelty in presentation, which is in strong contrast to the usual conservatism of Greek mints. It has been suggested that this was because these coins were not so much a trade currency as medallic souvenirs of the Olympic games; the fact that they were often countermarked (e.g. no. 496 obv., Pl. 155; no. 497 obv., Pl. 156) seems to mean that they were not normal current coins which could be redeemed in the state which issued them, but that they changed hands simply as bullion.

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Plate 154

489 ELIS, c. 510–500 BC Stater: 11.83 gm.
Obv. Eagle in flight carrying snake. *Rev.* Thunderbolt; *FA*.
 Brussels; *Colln Hirsch* 1343. Seltman 6.

490 ELIS, c. 500–490 BC Stater: 11.67 gm.
Obv. As no. 489. *Rev.* Nike carrying wreath; *FA*.
 Paris; *Colln de Luynes* 2240. Seltman 19.

491 ELIS, c. 470 BC Stater: 12.00 gm.
Obv. As no. 489; *FAAEION*. *Rev.* As no. 490.
 London; *PCG*, pl. 12, 40; *BMC* 5 Seltman 34.

492 ELIS, c. 480–470 BC Stater: 12.27 gm.
Obv. Eagle in flight carrying hare. *Rev.* (not shown). As no. 489.
 Hess/Leu 16. 4. 1957, 225. Seltman 26.

493 ELIS, c. 460–450 BC Stater: 12.52 gm.
Obv. Eagle swooping on running hare. *Rev.* (not shown). As no. 489.
 Hess/Leu 16. 4. 1957, 227. Seltman, series VIII (AL/αω).

Plate 155

494 ELIS, c. 450–430 BC Stater: 11.96 gm.
Obv. As no. 489. *Rev.* As no. 490; *FAAE*.
 London; *PCG*, pl. 12, 41; *BMC* 14. Seltman 78.

495 ELIS, c. 450 BC Stater: 12.02 gm.
Obv. Eagle in flight carrying tortoise. *Rev.* Zeus hurling thunderbolt, with eagle on outstretched l. arm;
OAYNIIKON.
 Berlin; Regling 325. Seltman 73.

496 ELIS, c. 440–430 BC Stater: 12.14 gm.
Obv. Eagle in flight carrying hare; to l., murex. *Rev.* Nike standing holding long palm branch and diadem; *FAAE*.
 Paris. Seltman 115.
Note. The obverse bears two countermarks, one a turtle, the other a Corinthian helmet.

Plate 156

497 ELIS, c. 430–420 BC Stater: 11.88 gm.
Obv. As no. 496. *Rev.* (not shown). Thunderbolt; *FAAEION*.
 London; *BMC* 26. Seltman 132.

498 ELIS, c. 430–420 BC Stater: 11.87 gm.
Obv. (not shown). Same die as no. 497. *Rev.* Nike seated on uppermost of two steps, holding long palm branch; in ex., olive twig; *FA*.
 London; *PCG*, pl. 12, 44; *BMC* 52. Seltman 133.

499 ELIS, c. 420–410 BC Stater: 11.98 gm.
Obv. Head of Zeus wearing wreath of wild olive. *Rev.* Thunderbolt within laurel wreath; *FA*.
 London; *PCG*, pl. 12, 42; *BMC* 54. Seltman 147.

Plate 157

500 ELIS, c. 400 BC Stater: 12.24 gm.

Obv. Eagle's head; beneath, leaf of white poplar. *Rev.* As no. 499; *FA*.

Berlin. Seltman 152.

501 ELIS, c. 375 BC Stater: 12.15 gm.

Obv. (not shown). Same die as no. 502. *Rev.* Thunderbolt; *FA* (the latter incuse).

London; *BMC* 37. Seltman 172.

502 ELIS, c. 375 BC Stater: 12.42 gm.

Obv. Shield, upon which an eagle standing on the back of a ram. *Rev.* (not shown). Same die as no. 501.

Brussels; *Colln Hirsch* 1346. Seltman 172.

Plate XVII

503 ELIS, c. 360 BC Stater: 12.31 gm.

Obv. Head of Zeus wearing laurel wreath; *FAAIEION*.

Rev. (not shown). As no. 504, but without magistrate's name.

London; *PCG*, pl. 23, 43; *BMC* 73. Seltman 176.

Plate 157

504 ELIS, c. 350 BC Stater: 12.15 gm.

Obv. Head of Zeus wearing laurel wreath. *Rev.* Eagle stand-

ing on Ionic capital (with snake in talons?); l. and r., *AP*; *FA*. Berlin; Regling 668. Seltman 193.

Plate 158

505 ELIS, c. 350 BC Stater: 12.29 gm.

Obv. As no. 504. *Rev.* As no. 504, but eagle stands on ram's head.

Priv. coll. Seltman 194.

506 ELIS, c. 325 BC Stater: 11.79 gm.

Obv. As no. 504. *Rev.* Eagle with wings spread and head turned back; *FA*.

London; *PCG*, pl. 30, 19; *BMC* 112. Seltman 213.

507 ELIS, c. 420–410 BC Stater: 12.07 gm.

Obv. Head of Hera wearing stephane ornamented with palmette front and back, and with lilies at sides; between ornaments, *HPA*. *Rev.* Thunderbolt within laurel wreath; *FA*.

Berlin. Seltman 251.

508 ELIS, c. 350 BC Stater: 12.22 gm.

Obv. As no. 507, but no inscription on stephane; *FA*. *Rev.* As no. 506, but eagle within laurel wreath.

Brussels; *Colln Hirsch* 1348. Seltman 329.

ZACYNTHUS SICYON MESSENE ARCADIA ACHAEA ARGOS LACEDAEMON

Within the Peloponnese there were two great coinages, those of Corinth and Elis, but especially in the second and third quarters of the fourth century many other places minted occasional large denominations of outstanding quality, some of them inspired by the work of the engravers of Elis. This rather sudden flowering of Peloponnesian coinage is one result of the end of Spartan domination of the area through her defeat by the Thebans at the battle of Leuctra, 371 BC; Sparta had discouraged nationalist and separatist tendencies, of which the possession of a handsome coinage was one expression, so that before c. 375 BC almost the only coinage of this kind in the Peloponnese was the special case of Elis, which had a religious and international sanction. These large coins can have had little economic significance, for most of them were produced in small numbers only (Sicyon is an exception), though some were accompanied by plentiful coinages of smaller denominations, as at Argos and for the Arcadian League.

The coinage of Sicyon (no. 510, Pl. 159) seems to have begun about 420 BC, and in some degree to have replaced that of Aegina, which had been the principal currency of the Peloponnese until Aegina was occupied by Athens in 431 BC. In the fourth century Sicyon's output was considerable, and, being struck on the same weight standard as that of Thebes, the dominant power in Greece, her coinage enjoyed a circulation outside the Peloponnese.

Messenia in the south-west Peloponnese had been subject to Sparta since the seventh century, but after the battle of Leuctra, it became an independent state with its capital at Messene on the slopes of Mount Ithome, where there was a cult of Zeus, who appears on the reverses of the coins (no. 511, Pl. 159).

Early in the fifth century the Arcadians, living in the mountainous heart of the Peloponnese, had banded themselves into a league to resist Spartan encroachment, and had struck a federal coinage. After the battle of Leuctra in 371 BC, Epaminondas reconstituted this league as a counter-poise to Sparta, and founded a federal capital at Megalopolis, where nos 512, 513 (Pl. 159) were struck, probably on the occasions of federal festivals. On the obverse is Zeus, who was worshipped on Mount Lycaeus, and on the reverse, Pan, a god native to Arcadia. In addition to this federal coinage, some cities of Arcadia issued their own coinages, such as Stymphalus and Pheneus (nos 514, 515, Pl. 160). The slaying of the Stymphalian birds was one of the labours of Heracles, who is seen in action on the reverse.

An Achaean League was formed in 280 BC and attained considerable political power in the third century. The unique stater (no. 516, Pl. 161), however, is clearly of earlier date, and appears to be evidence for the formation after the battle of Leuctra of an Achaean League comparable to those of the Messenians and the Arcadians.

Argos was the long-standing and usually unsuccessful rival of Sparta for the hegemony of the Peloponnese. A plentiful

coinage of drachms and smaller fractions had been struck since the end of the sixth century, but it was not until after the threat of Sparta had been removed that larger denominations were produced (no. 517, Pl. 161). On the obverse was Hera, the centre of whose cult was at the Heraeum in Argive territory. The reverse of the drachm shows the Argive hero Diomedes carrying off the sacred statue of Pallas Athene from Troy (no. 518, Pl. 161). The high quality of these coins is consistent with the fame of the Argive school of sculptors.

At Epidaurus was the sanctuary of the healing god Asclepius, whose gold and ivory cult-statue by Thrasymedes of Paros is shown on the reverse of the mid-fourth century coinage (no. 519, Pl. 161).

Conservative Sparta long retained in use the iron spits which had once formed the currency of the Peloponnese; her deliberate refusal to strike silver coins was no doubt supported on moral and social grounds, but was due to other factors as well, Sparta had no accessible source of silver, nor did she depend in any degree on external trade; her organization, moreover, and code of laws discouraged private wealth and rendered a native silver currency unnecessary. Sparta is, admittedly, an extreme case, but she is also a reminder that more normal, but still substantial, Greek communities, such as Locri, and even some which, like Megara, depended on foreign trade, nevertheless managed for considerable periods without coinages of their own. Only in the third century, in the days of her decline, did the rulers of Sparta (Lacedaemon) mint coins (nos 520–522, Pl. 161) modelled on those of other Hellenistic kingdoms.

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Plate 159

509 ZACYNTHUS, c. 370 BC Stater: 11.62 gm.

Obv. Head of Apollo wearing laurel wreath. *Rev.* Iamus being fed by serpents; *ZAKYNΘIΩN*.

London; *PCG*, pl. 23, 44; *BMC* 22.

Note. Iamus, a son of Apollo, was fed by serpents at his birth, and had a cult on Zacynthus; he was also the eponymous ancestor of the Iamidae, a family of seers (Hiquily, *BSFN*, Nov. 1948, p. 3). The type has usually been interpreted as the child Heracles wrestling with serpents; *cf.* Croton, no. 271 (Pl. 94), Thebes no. 454 (Pl. 145) and Samos, no. 616 (Pl. 183).

510 SICYON, c. 420 BC Stater: 11.84 gm.

Obv. Chimaera; *ΣΕ*. *Rev.* Dove flying; around, olive wreath. *Münzen und Medaillen*, Basel, Sale XIX, 432.

511 MESSENE, c. 360 BC Stater: 12.18 gm.

Obv. Head of Persephone with stalk of barley in hair. *Rev.* Zeus hurling thunderbolt, with eagle on outstretched l. arm; *ΜΕΣΣΑΝΙΩΝ*.

London; *PCG*, pl. 24, 45; *BMC* 1.

Note. The obverse is derived from the Syracusan decadrachm of Euaenetus, nos 104–106 (Pls 34–36).

512 ARCADIAN LEAGUE, c. 370–360 BC Stater: 12.22 gm.

Obv. Head of Zeus wearing laurel wreath. *Rev.* Young horned Pan sits on chlamys thrown over rock; in r. hand, throwing stick; on ground, pipes; on rock, *ΟΑΥΜ* (artist's signature); *ΑΡΚ* (monogram).

Paris.

513 ARCADIAN LEAGUE, c. 370–360 BC Stater: 11.92 gm.

Obv. and *Rev.* (not shown). As no. 512.

London; *PCG*, pl. 24, 48; *BMC* 48.

Plate 160

514 STYMPHALUS, c. 350 BC Stater: 11.45 gm.

Obv. Head of Artemis wearing laurel wreath, ear-ring (consisting of rosettes, crescent and five pendants) and necklace; hair gathered on crown of head. *Rev.* Heracles, carrying bow and lion skin in l. hand, raises club to strike; below, *ΣΟ*; *ΣΤΥΜΦΑΛΙΩΝ*.

Paris.

515 PHENEUS, c. 360 BC Stater: 11.89 gm.

Obv. Head of Persephone wearing necklace and ear-ring (as on no. 415) and wreath of barley in hair. *Rev.* Hermes, wearing petasos and carrying caduceus in r. hand, supports chlamys and child Arcas on l. arm; *ΦΕΝΕΩΝ*.

Munich.

Note. The obverse is copied from the Syracusan decadrachms of Euaenetus, nos 104–106 (Pls 34–36). The reverse illustrates the story of the rescue of Arcas, child of Zeus and Callisto, by Hermes. Arcas was the eponymous ancestor of the Arcadians.

Plate 161

516 ACHAEAN LEAGUE, c. 370–360 BC Stater: 12.00 gm.

Obv. Head of Artemis (or Demeter?) wearing necklace and ear-ring (as on no. 514); hair in knot on crown of head. *Rev.* Zeus seated on throne which has sphinx supports to the arms; in his l. hand, sceptre; on his outstretched r., eagle with wings spread; beneath feet, footstool; to l., crested helmet; *ΑΧΑΙΩΝ* (triple struck).

London (BM); *PCG*, pl. 23, 41.

517 ARGOS, c. 370–350 BC Stater: 12.25 gm.

Obv. Head of Argive Hera, wearing polos decorated with palmettes. *Rev.* Two dolphins; between, ivy leaf and Corinthian helmet; *ΑΡΓΕΙΩΝ*.

London; *BMC* 37.

518 ARGOS, c. 370–350 BC Drachma: 5.35 gm.

Obv. As no. 517, but to l., monogram. *Rev.* Diomedes, naked but for chlamys, carrying the Palladium in l. hand and sword in r.; *ΑΡΕΙΩΝ*.

London; *BMC* 44.

519 EPIDAUROS, c. 350–330 BC Trihemidrachm: 4.60 gm.

Obv. Head of Apollo wearing laurel wreath. *Rev.* Asclepius seated, holding sceptre and resting r. hand on snake; beneath throne, dog lying and *ΘΕ*; *Ε*.

Munich.

520 LACEDAEMON, Areus, 309/8–265 BC

Tetradrachm: 16.56 gm.

Obv. Head of King Areus, diademed. *Rev.* Archaic idol of Apollo of Amyclae (or of Artemis?) wearing crested helmet, and holding bow in l. hand and spear in raised r.; behind the idol stands a goat; to l., a wreath; *ΑΑ*.

London; *PCG*, pl. 29, 14; *BMC* 1.

Note. Cleomenes III, 235–222 BC, has also been suggested as the subject of the obverse portrait.

521 LACEDAEMON, c. 260–210 BC Tetradrachm.

Obv. Head of Apollo of Amyclae (*cf.* *rev.* of no. 520).

Rev. Bearded Heracles sitting on lion skin thrown over rock and holding club; *ΑΑ*.

Athens.

Note. The obverse is often described as a head of Athena.

522 LACEDAEMON, Nabis, 207–192 BC

Tetradrachm: 17.04 gm.

Obv. Head of Nabis, wearing laurel diadem. *Rev.* As no. 521; *ΒΑΣΙΛΕΩΣ ΝΑΒΙΟΣ*.

London (BM); *PCG*, pl. 36, 20.

Note. *ΒΑΣΙΛΕΩΣ* is a Laconian dialect form for *ΒΑΣΙΛΕΩΣ*.

THE CYCLADES

The greatest silver coinage of the sixth century was struck by Aegina (no. 335, Pl. 113), probably from Siphnian silver; in the same period many Aegean islands also struck similar coinages, though on a much smaller scale. Nearly always uninscribed, their precise attribution is sometimes doubtful, though the cantharus of Dionysus at Naxos (nos 523, 524, Pl. 162), and the lyre of Apollo at Delos, his birthplace (no. 526, Pl. 162), are certain. The eagle (no. 527, Pl. 162) is attributed to Siphnos on the strength of the later inscribed coin (no. 534, Pl. 163), and for Seriphus (no. 529, Pl. 162) and Paros (no. 530, Pl. 162; *cf.* no. 536, Pl. 163) there is literary evidence. Most of these varied coinages were not resumed after the Persian Wars, though Siphnos (no. 534, Pl. 163) was perhaps an exception for a short while. After 480 BC Athens, with whom most of the islands were in forced alliance, discouraged coinages which might compete with her own; it appears that this policy had become fully effective among the Aegean islands long before the Coinage Decree (c. 446 BC?) attempted to impose it upon all the allies of Athens (see p. 324).

Melos, alone of the islands, succeeded in remaining independent, so that Melian coinage was resumed after the Persian Wars. In 426 BC, however, the Athenians sent an unsuccessful expedition to force Melos into the Athenian alliance; ten years later the attempt was repeated, the adult Melians were massacred, and the women and children enslaved. This brutal exercise of Athenian power was made the occasion by Thucydides of a dialogue on the theme of might against right.

With the fall of Melos must be connected the hoard found on the island in 1907. It contained nearly one hundred coins, nearly all with the island's punning device (*μήλον* = apple) on the obverse; there were about two dozen different reverse types, of which three are shown here (nos 531–533, Pl. 163). But the most remarkable feature of the hoard was that none of these numerous types was already known, nor, indeed, has any of them come to light from other sources since 1907. From the concentration of die links they appear to have been minted in the years immediately before 416, perhaps in preparation for the expected Athenian attack, but never to have been circulated before the blow fell.

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Plate 162

523 NAXOS, c. 500–490 BC Stater: 12.17 gm.

Obv. Cantharus decorated with ivy wreath and with bunches

of grapes hanging from handles; above, ivy leaf. *Rev.* (not shown). Incuse square divided into four squares.

Brussels; *Colln Hirsch* 1398.

524 NAXOS, c. 500–490 BC Stater: 12.12 gm.
Obv. and *Rev.* (not shown). As no. 523.
London; *PCG*, pl. 5, 44; *BMC* 2.

525 TENOS, c. 550–500 BC Stater: 12.05 gm.
Obv. Bunch of grapes. *Rev.* (not shown). As no. 523.
Brussels; *Colln Hirsch* 1399.

526 DELOS, c. 550–500 BC Didrachm: 8.55 gm.
Obv. Lyre; above, two dolphins. *Rev.* (not shown). Incuse square.
Paris.

527 SIPHNOS, c. 550 BC Stater: 12.23 gm.
Obv. Eagle flying. *Rev.* (not shown). Incuse square.
Berlin; Regling 37.
Note. The attribution is based on no. 534 (Pl. 163).

528 THERA? c. 550–525 BC
Obv. Two dolphins. *Rev.* (not shown). Incuse square of windmill pattern.
Athens.

529 SERIPHOS, c. 550–525 BC Stater: 12.02 gm.
Obv. Frog. *Rev.* (not shown). Incuse square.
Paris.

530 PAROS, c. 550 BC Stater: 12.32 gm.
Obv. Goat kneeling with head reverted; below, dolphin.
Rev. (not shown). Incuse square.
London; *PCG*, pl. 5, 45; *BMC* 1.

Plate 163

531 MELOS, c. 420–416 BC Stater: 13.90 gm.

Obv. (not shown). As no. 532. *Rev.* Ram's head; *MAAION*.
London (BM); *PCG*², pl. 52, 22.

532 MELOS, c. 420–416 BC Stater: 13.67 gm.
Obv. Apple. *Rev.* Young male head wearing conical helmet; *MAAION*.
Oxford.

533 MELOS, c. 420–416 BC Stater: 13.88 gm.
Obv. (not shown). As no. 532. *Rev.* Gorgoneion surrounded by snakes; *MAAION*.
Berlin; Regling 452 (rev.).
Note. Nos 531–533 come from a hoard discovered on Melos in 1907, which is the source of all the known specimens of these types; the hoard was probably buried during the Athenian siege in 416, and contains Melian issues of the immediately preceding years. The three types here shown must all be contemporary, since they are closely linked by the use of common obverse dies. (See Kraay, *NC* 1964, pp. 1 ff.)

534 SIPHNOS, c. 480 BC Stater: 11.90 gm.
Obv. Head of Apollo. *Rev.* Eagle flying; to r., leaf; *ΣΙΦ*.
Paris.

535 IOS, c. 325–300 BC Didrachm: 6.79 gm.
Obv. Head of Homer, diademed; *OMHPOY*. *Rev.* (not shown). *IHTΩN* within laurel wreath.
Berlin; Regling 786.

Note. This island claimed to be the burial place of Homer.

536 PAROS, c. 250 BC Didrachm: 7.65 gm.
Obv. Female head with hair bound with band. *Rev.* Goat; above, *ANAEIK* (magistrate's name); *ΙΑΠΙ*.
London; *PCG*, pl. 36, 25; *BMC* 11.

CRETE

Crete, the birthplace of Zeus, was populated by Dorians from the Peloponnese, and in this island, which lay away from the main stream of Greek history, the natural conservatism of the Dorians was intensified by geographical isolation. For this reason Cretan coinage has a distinctive character of its own; it is rich in local legend, much of which has its roots in the prehistoric Minoan past; there are deities peculiar to Crete, and sometimes the normal Greek deities take on a new guise through identification with them. Strangest of all is the unevenness of Cretan work. Some mints such as Lyttus (no. 548, Pl. 167) rarely rise above the uncouth, while others produced some of the masterpieces of Greek coinage (*e. g.* Sybrita, nos 553–555, Pl. 168). Even within mints the fluctuations are sometimes extreme, for a die commissioned from a master seems often to have been copied by unskilled local craftsmen. A fine die, too, was sometimes used at more than one mint, perhaps hawked round by an itinerant engraver. Much Cretan coinage has an emergency or make-shift character, and, indeed, many mints seem to have suddenly increased their output in the late fourth century, when overstriking on both Cretan and imported coins was common (*e. g.* nos 538, Pl. 164 and 552, Pl. 167). Crete was an important source of mercenaries, and this influx of foreign coin may be due to soldiers returning from Hellenistic wars laden with booty or pay.

Though frequently difficult to date, probably no Cretan coinage is earlier than the middle of the fifth century, and apart from a few issues of Cnossus, Gortyna, and Phaestus nearly all is later than 350 BC. Cnossus was the most important mint in the island, and its coinage is an eloquent record of its Minoan past; the labyrinth, the home of the Minotaur, was the device of the city, though the variety of the forms which this takes (Pl. 165) shows that no clear tradition of its shape had survived from Minoan times. The Minotaur itself is also seen (nos 541, 542, Pl. 165), and even the prophet-like figure of Minos himself, the legendary king of Crete, who after his death became one of the judges of the dead in Hades (no. 543, Pl. 165).

Also important were the two mints of Gortyna and Phaestus in the south central part of the island, between which there seems at times to have been a monetary convention. The earliest issue of Gortyna with its unusual inscription (no. 537, Pl. 164) has an exact parallel at Phaestus; and in the fourth century a bull normally forms the reverse at both cities (no. 539, Pl. 164; nos 550, 551, Pl. 167). The willow-tree, too, had a significance in cult at both Gortyna and Phaestus; at the former Europa rests in the tree (no. 539, Pl. 164), or is visited there by Zeus in the form of an eagle (no. 540, Pl. 164); at the latter a young god, Velchanos (a form of Zeus), also sits in its branches (no. 549, Pl. 167).

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Plate 164

537 GORTYNA, c. 450 BC Stater: 11.23 gm.

Obv. Bull carrying Europa. *Rev.* Lion's head facing within central square; around, *ΓΟΡΤΥΝΟΣ ΤΟ ΠΑΙΜΑ* (= 'this is the coin of Gortyna').

Berlin; Regling 174. Svoronos, p. 158, 1.

538 GORTYNA, c. 430–420 BC Stater: 11.87 gm.

Obv. As no. 537. *Rev.* Hermes wearing winged petasos; *ΓΟΡΤΥ*.

London; *PCG*², pl. 52, 20. Svoronos –.

Note. This has been struck upon a coin of Aegina, as no. 336, Pl. 113.

539 GORTYNA, c. 325 BC Stater: 12.25 gm.

Obv. Europa seated in willow-tree. *Rev.* Bull licking flank; *ΓΟΡΤΥΝΙΟΝ*.

London; *PCG*, pl. 30, 21; *BMC* 6. Svoronos, p. 162, 35.

540 GORTYNA, c. 300 BC Stater: 11.47 gm.

Obv. Europa seated in willow-tree raising veil with r. hand; in her lap, eagle with wings spread. *Rev.* (not shown). As no. 539.

Berlin; Regling 782. Svoronos, p. 168, 83.

Plate 165

541 CNOSSUS, c. 450 BC Stater: 11.40 gm.

Obv. Minotaur. *Rev.* Stylized labyrinth with star in centre. Paris. Svoronos, p. 65, 3.

542 CNOSSUS, c. 400 BC Stater: 11.62 gm.

Obv. As no. 541. *Rev.* As no. 541, but no star in centre.

Paris. Svoronos, p. 67, 12.

543 CNOSSUS, c. 350 BC Stater: 11.51 gm.

Obv. Female head (Ariadne?) with reeds in hair, within maeander border (representing labyrinth); *ΚΝΩΣΙΟΝ*. *Rev.* Minos seated on throne, holding sceptre; *ΜΙΝΩΣ*.

Berlin. Svoronos, p. 67, 14.

544 CNOSSUS, c. 350–325 BC Stater: 11.08 gm.

Obv. Head of Hera wearing polos. *Rev.* Labyrinth; on l., arrowhead; on r., thunderbolt; l. and r., *ΑΡ*; *ΚΝΩΣΙΩΝ*. London; *PCG*, pl. 24, 54; *BMC* 24. Svoronos, p. 73, 67.

Plate 166

545 ITANUS, c. 450 BC Stater: 11.60 gm.

Obv. Bearded sea-god with fish tail, holding thunderbolt; above tail, pellet; to r., cicada. *Rev.* Ornamental star within olive wreath.

Hess/Leu 7. 4. 1960, 194. Svoronos –.

546 ITANUS, c. 375–350 BC Stater: 11.25 gm.

Obv. As no. 545, but holding trident; *ΙΤΑΝΙΟΝ*. *Rev.* Two opposed sea monsters.

Paris; *Colln de Luynes* 2356. Svoronos, p. 203, 20.

547 PRAESUS, 375–350 BC Stater: 10.39 gm.

Obv. Zeus seated holding sceptre and eagle. *Rev.* Forepart of goat with head reverted.

Brussels; *Colln Hirsch* 1392. Svoronos, p. 289, 25.

Plate 167

548 LYTTUS, c. 400 BC Stater: 12.34 gm.

Obv. Eagle flying. *Rev.* Forepart of boar in incuse square with dotted border; *ΛΥΚΤΙΟΝ*.

Brussels; *Colln Hirsch* 13.88. Svoronos –.

549 PHAESTUS, c. 325–300 BC Stater: 11.86 gm.

Obv. Young Zeus Velchanos seated in a willow-tree, holding a cock; at his side, a second cock(?); *ΦΕΛΧΑΝΟΣ* (retrograde). *Rev.* (not shown). Bull; *ΦΑΙΣΤ* (retrograde).

London; *PCG*, pl. 30, 23; *BMC* 19. Svoronos, pl. 259, 31.

Note. Like many Cretan coins of this period this is overstruck on a coin of Cyrene of the general type of no. 788, Pl. 214 (*cf.* also no. 552).

550 PHAESTUS, c. 350 BC Stater: 11.92 gm.

Obv. Young Heracles, holding club, seated on rock; to l., bow and quiver hanging from tree; *ΦΑΙΣΤΙΟΝ*. *Rev.* Bull butting, within olive wreath.

Berlin; Regling 660. Svoronos, p. 260, 39.

551 PHAESTUS, c. 350–325 BC Stater: 11.06 gm.

Obv. Winged giant, Talos, holding stone in raised r. hand; *ΤΑΛΩΣ* (retrograde). *Rev.* Galloping bull; *ΦΑΙΣΤΙΩΝ* (retrograde).

Hess/Leu 24. 3. 1959, 230. *Cf.* Svoronos, p. 264, 27.

Note. Talos was a man of brass constructed by Hephaestus for Minos to guard Crete. He moved round the island daily and hurled stones at approaching ships.

552 PHAESTUS, c. 325 BC Stater: 11.50 gm.

Obv. Heracles, with lion skin over l. arm, attacks Lernaean Hydra with club; between his legs, crab. *Rev.* (not shown). Bull; ΦΑΙΣΤΙΩΝ.

Paris. Svoronos, p. 263, 59.

Note. Like many Cretan coins of this period, this is overstruck upon a coin of Cyrene (*cf.* also no. 549). When Heracles was destroying the Hydra, a giant crab came to its assistance and wounded Heracles in the foot.

Plate 168

553 SYBRITA, c. 330 BC Stater: 11.43 gm.

Obv. Young Dionysus, carrying thyrsus, riding on lioness.

Rev. Hermes, naked but for chlamys, rests foot on rock and

ties sandal; on l., caduceus; ΣΙΒΡΥΤΙΩΙ (*i.e.* 'to the god of Sybrita').

Priv. coll. *Cf.* Svoronos, p. 315, 6.

Note. For the form of the reverse legend see P. Naster, 'La legende ΣΙΒΡΥΤΙΩΙ sur des monnaies de Sybrita', *Rev. Belge* 1947, pp. 35ff.

554 SYBRITA, c. 350 BC Stater: 11.45 gm.

Obv. Bearded Dionysus, ivy-crowned, sitting on chair and holding thyrsus and cantharus. *Rev.* (not shown). Hermes standing holding patera and caduceus; ΣΥΒΡΙΤΙΩΝ.

Paris. Svoronos, p. 314, 1.

555 SYBRITA, c. 360 BC Stater: 11.29 gm.

Obv. Ivy crowned head of bearded Dionysus; on r., bunch of grapes. *Rev.* Head of Hermes wearing petasos; on r., caduceus; ΣΥΒΡΙΤΙΩΝ.

London; *PCG*, p. 24, 57. Svoronos, p. 315, 4.

REGAL COINAGES

MACEDONIA THRACE

Alexander I ruled Macedonia for almost the whole of the first half of the fifth century; emerging from the Persian Wars on the winning side, and eager to claim a Hellenic origin for his family, he made Macedonia a power to be reckoned with in Greek politics. He must also have been a ruler of exceptional wealth, for one of his mines is said to have yielded a talent of silver every day (*Her.* V, 17). His coinage had its roots in that of the Macedonian tribes, particularly the Bisaltae (compare no. 384, Pl. 125 with no. 557, Pl. 169), whose territory with its silver mines he absorbed into his own; like them he struck octadrachms, but of far superior artistic quality (no. 556, Pl. 169). The identity of the youthful horseman remains uncertain; he wears a royal diadem, but Alexander himself he can hardly be, for he had been on the throne some forty years by the time no. 556 was struck; perhaps Perdiccas I, the half-legendary ancestor of the royal house, is intended. In addition to octadrachms Alexander also minted tetradrachms of the general type of no. 558 (Pl. 169), on which the protome of a goat is a pun on Aegae, the capital of Macedonia (ἀίξ, αἰγός, a goat; *cf.* nos 380, 381, Pl. 124).

Under Alexander's successor Perdiccas II, who played an important but devious part in the Archidamian War, only small denominations were struck, but in the reign of Archelaus I (413–399 BC) larger coins are again found (nos 558, 559, Pl. 169). It is a feature of the coinage of this period that the issues which show a horse alone (nos 559–561, Pl. 169) were minted in debased silver, while those which have horse and rider appear to be struck in pure metal (no. 558, Pl. 169); this may have been an early step towards token currency, whereby base coins were employed for internal purposes, while those destined for foreign trade were necessarily of pure metal. During the early fourth century Macedonia was politically unstable, and the succession of short-lived kings was terminated only in 359 BC by the accession of Philip II.

Philip rapidly unified and re-organized the Macedonian state, and with a combination of political and military genius began to extend the limits of his power to the Black Sea. All the north Greek cities fell to him in turn, including the mining district of Mount Pangaeus, which yielded 1000 talents annually. In mainland Greece diplomatic moves were soon followed by military intervention, and the defeat of Athens and Thebes at Chaeronea in 338 BC left Philip as the dominant power. Two years later he was assassinated while organizing a joint Macedonian and Greek expedition against Persia, a design soon to be realized by his son Alexander.

Philip's coinage is appropriate to the new political status of Macedonia. Its most remarkable feature is certainly the emission of gold staters (nos 564–566, Pl. 171) on a scale unprecedented in a Greek state, an output which was made possible by the conquest of all the mining areas of northern Greece. The choice of Apollo's head for the obverse was a sign that Macedonia had taken the place of the Chalcidian League (*cf.* nos 407–412, Pls 132–134) as the chief economic power in the area, and, indeed, both gold and silver was struck upon the standards used by the League. These facts suggest that Philip's gold coinage may not have been initiated before his capture of Olynthus, the League capital in 348 BC.

His silver coinage certainly began earlier, for its usual reverse type with a jockey bearing the palm of victory (no. 563, Pl. 170) refers to the success of Philip's horse at the Olympic Games of 356 BC, the year of Alexander's birth. Slightly earlier (or from a different mint) may be the rarer variant with Philip himself on horseback (no. 562, Pl. 170). The obverse always shows Olympian Zeus, no doubt another reference to Philip's agonistic victories, though the ruler of the gods was also an appropriate type for the overlord of the Greek states.

Philip's coinage still awaits detailed analysis, a task which is complicated by the continued use of the same types after his death. His silver coins, in particular, quickly gained popularity in the Danube area, where they were copied with increasing inaccuracy by the local tribes; further west gold coins were preferred, and they suffered a similar fate. To serve trade with these areas the Macedonian mints seem to have prolonged the production of these established and favoured types, which in their ultimate disintegration formed the basis of Gallic and British coin types.

Two years after his accession in 336 BC Alexander realized his father's plan of invading the Persian empire. Asia Minor was quickly won, and the way further east was opened by his victory over the main Persian army at Issus (near Alexandretta) in November 333 BC. The next year was occupied in the conquest of Phoenicia (including the prolonged siege of Tyre) and of Egypt, so that it was not until 331 BC that he was ready to deal with Persia itself. At Gaugamela (in Mesopotamia) the last major Persian army was defeated, after which Alexander was quickly recognized as king of Persia in succession to Darius III. The next few years were devoted to the subjugation of the outlying eastern provinces of the empire, and by 325 BC he had extended its frontier to the lower Indus river, at which point his exhausted troops compelled him to turn back. He died of a fever at Babylon in 323 BC in his thirty-third year.

By his early death Alexander bequeathed a subject for infinite speculation—his plans for the future of his huge empire. Amid almost ceaseless warfare, he had had little enough time to organize, but one thing essential for administration in both peace and war he had arranged, the provision of an imperial coinage in both gold and silver. Ample bullion lay ready to hand in the captured Persian treasuries, and his coins are today among the commonest surviving from the ancient world; but from its very size and uniformity this coinage bristles with still incompletely solved problems concerning types, chronology and mint-attributions.

The types of Alexander's coinage were uniform throughout his empire; on the gold, Athena and Nike carrying a naval standard, on the silver, Heracles and seated Zeus (no. 569, Pl. 172); the name of Alexander, with or without the title of king, was always present. Though the precise significance of these types can be debated, their general appropriateness to Alexander is clear enough. Athena, the former champion of the Greeks against the Asiatic power of Troy, would likewise protect Alexander in his war against Persia; Nike, with wreath and naval standard, symbolizes his victorious power on land and sea. Heracles, who had already appeared on Macedonian coinage as the ancestor of the royal house (nos 560, 561, Pl. 169), had been the mighty champion of civilization against the destructive forces of evil; the seated ruler of the gods, based immediately on the Semitic type of the Baal of Tarsus (no. 676, Pl. 194), was recognizable by Greeks, Phoenicians and Persians alike as representing a supreme power, of which Alexander was the earthly representative. The head of Heracles has often been seen as a portrait of Alexander himself, and later antiquity certainly so regarded it; that it was originally so intended is perhaps unlikely, though the god was no doubt represented in his youthful rather than his more elderly form (as no. 560, Pl. 169) out of conscious compliment to the young king.

The monetary needs of Alexander's empire required numerous strategically sited mints; the task of identifying their respective products is a long and difficult one. An additional complication is the existence of many posthumous issues, for coinage in Alexander's name not only continued to be produced after his death, but was often revived by civic mints a century or more later; issues of this latter class can be recognized by their flat, spread fabric and the absence of a dotted border from the reverse (no. 570, Pl. 172). It was long supposed that the symbols which accompany the reverse types concealed the identity of the issuing mint, and on this hypothesis long lists of such mints were constructed, until it was observed that symbols of supposedly separate mints were often linked by the use of identical obverse dies. Nowadays mints are identified and located by the three criteria of style, die-linked sequences and distribution in hoards. In Alexander's lifetime there appear to have been some twenty-two mints distributed as follows: Macedonia and Greece, 3; Asia Minor, 9; Syria and Phoenicia, 7; Egypt, 1 (Alexandria, no. 569, Pl. 172); Babylonia, 1 (Babylon, no. 572, Pl. 173); Persia, 1.

The two decades following Alexander's death witnessed the dissolution of his empire into a number of rival powers each ruled by one of his associates, who first acted as satraps, but soon assumed the role and title of independent kings. Seleucus gained Syria (see p. 372), and Ptolemy Egypt (see p. 381); Macedonia and much else fell to Antigonus, whose aim was the re-unification of Alexander's empire. In this he was brilliantly assisted by his son, Demetrius, nick-named Poliorcetes ('the Besieger'), who, after his father's death succeeded to a truncated kingdom based on Greece and on a precarious control of Aegean waters. Poseidon is prominent on his coinage (nos 573, 574, Pl. 174), and the prow surmounted by Nike commemorates his victory over Ptolemy's fleet off Cyprus in 306 BC. Demetrius' portrait is shown with a royal diadem and a bull's horn which associates him with Poseidon (*cf.* Poseidonia, nos 221, 222, Pl. 78), whose son he claimed to be; in this way he attempted to put himself on an equal footing with Alexander, the reputed son of Zeus Ammon (*cf.* nos 580–582, Pl. 176).

During the third century Macedonia declined to the position of a minor Hellenistic kingdom, though Antigonus III (nos 575,

576, Pl. 174) succeeded in re-establishing control of much of the Greek mainland. His successor, Philip V (no. 577, Pl. 175), repeatedly came into conflict with Rome, until he was decisively defeated by Flaminius at Cynoscephalae in Thessaly in 197 BC, after which mainland Greece was declared to be free, and was placed under Roman protection. With these events must be connected the remarkable gold portrait coin of Flaminius (no. 579, Pl. 175), though its precise purpose and place of issue remain uncertain. Perseus (no. 578, Pl. 175), son of Philip V and last king of Macedonia, at first pursued a policy of friendship with Rome, while he consolidated his power. Later he was defeated at the battle of Pydna in 168 BC, was dethroned and died in Italy shortly afterwards.

Thrace was an area occupied by a number of independent tribes which were incorporated into the kingdom of Macedonia by Philip II. After Alexander's death Thrace and north-west Asia Minor became the province of Lysimachus, one of Alexander's closest associates. Employing the hardy man-power of his territories, he played an active part in the wars of the early third century (eventually winning Macedonia and Thessaly) until he was defeated and slain by Seleucus in 281 BC. His plentiful coinage carries a fine portrait of Alexander bearing the horn of Zeus Ammon, his reputed father (nos 580, 581, Pl. 176); as happened with Philip II and Alexander, there are many posthumous issues (no. 582, Pl. 176), often from mints over which he had never ruled.

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Plate 169

556 MACEDON, Alexander I, c. 495–454/51 BC

Octadrachm: 28.95 gm.

Obv. Young horseman, wearing chlamys, kausia and diadem, and carrying two spears; caduceus brand on rump of horse; below, a hound. *Rev.* Central square, around which *AAEE-ANΔPO*.

Paris. Raymond 111 (struck c. 460–454/51).

557 MACEDON, Alexander I, c. 495–454/51 BC

Octadrachm.

Obv. Young man wearing chlamys, kausia and diadem, and holding two spears, stands by horse. *Rev.* (not shown). As no. 556.

London (BM); *PCG*, pl. 11, 18.

Raymond 50 (struck 476/5 – c. 460).

558 MACEDON, Archelaus I, 413–399 BC Stater: 10.21 gm.

Obv. Young horseman wearing kausia and chlamys, carrying

two spears. *Rev.* Forepart of kneeling goat with head reverted within linear square; *APXEAAO*.
 London (BM); *PCG*, pl. 11, 19.

559 MACEDON, Archelaus I, 413–399 BC Stater: 10.29 gm.

Obv. Young male head with hair in band. *Rev.* Horse; *APXEAAO*.

Berlin; Regling 479.

560 MACEDON, Amyntas III, 393–370 BC Stater: 9.16 gm.

Obv. Head of bearded Heracles in lion skin. *Rev.* Horse within linear square; *AMYNTA*.

London (BM); *PCG*, pl. 22, 17.

561 MACEDON, Perdikkas III, 365–359 BC Stater: 10.30 gm.

Obv. Head of young Heracles wearing lion skin. *Rev.* Horse; below, club; *ΠΕΡΔΙΚΚΑ*.

London (BM); *PCG*, pl. 22, 18.

fighting attitude; in field, two monograms; *ΒΑΣΙΛΕΩΣ ΦΙΛΙΠΠΟΥ*.

Hess/Leu 16. 4. 1957, 194.

578 MACEDON, Perseus, 179–168 BC

Tetradrachm: 16.90 gm.

Obv. Head of Perseus diademed. *Rev.* Eagle with wings spread standing on thunderbolt, within oak wreath; monograms *AY* and *HP*; below, plough; *ΒΑΣΙΛΕΩΣ ΠΕΡΣΕΩΣ*. Priv. coll.

579 UNCERTAIN MINT, Titus Quinctius Flamininus,

228–174 BC Gold stater: 8.52 gm.

Obv. Head of Flamininus. *Rev.* Nike holding wreath and palm; *T. QVINCTI*.

Berlin.

Note. The exact date and occasion of this remarkable issue are still in doubt, but the most likely are the years immediately following the proclamation of the freedom of Greece in 196 BC.

Plate 176

580 THRACE, Lysimachus, 306–281 BC

Tetradrachm: 17.22 gm.

Obv. Head of Alexander the Great diademed, with horn of Zeus Ammon; below, *K*. *Rev.* Athena seated on throne holding Nike; at her side spear and shield with lion's head boss; to l., *N* and cult image; in ex., crescent; *ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ*.

London (BM). Mint of Pergamum.

581 THRACE, Lysimachus, 306–281 BC

Tetradrachm: 17.10 gm.

Obv. As no. 580. *Rev.* (not shown). As no. 580, but different monogram and symbol.

Priv. coll. Mint of Amphipolis.

582 THRACE, Lysimachus, 306–281 BC Gold stater: 8.51 gm.

Obv. As no. 580. *Rev.* As no. 580, but on throne, *BY* (= Byzantium); to l., *Θ*; in ex., trident flanked by dolphins.

Hess/Leu 4. 4. 1963, 39.

Mint of Byzantium (posthumous issue)

ASIA

In Sicily, in South Italy, in mainland Greece and on the coasts of the Aegean the producers of coinage were nearly all Greek; only on the extreme western fringes were the Carthaginians and the Etruscans non-Greeks, who adopted the practice of coinage from their Greek neighbours. In Asia, on the other hand, where the use of coinage of Greek type ultimately extended from the west coast of Anatolia to north-west India, it was the Greeks who formed the fringes, being originally at home only upon the Anatolian coasts, and even there the degree of Hellenization became perceptibly less towards the east; the rest of this vast area was occupied by oriental peoples who were in the course of time more and more influenced by Greek culture. This process had already begun under the Persian Empire, but was forcibly accelerated by the conquests of Alexander the Great, which shifted the centre of the Greek world from mainland Greece eastwards to the Hellenistic capitals of Pergamum, Antioch and Alexandria.

It was in the extreme west of Asia, in the area of contact between the Greeks of Ionia and the kingdom of Lydia, that the idea of coinage first developed in the second half of the seventh century BC. By about 600 BC a number of electrum issues had been produced, among which those of the kingdom of Lydia are certainly identifiable; many of the others cannot yet be attributed with confidence, though there is little reason for regarding them as the private productions of merchants or bankers, rather than the first true city or state coinages. In the course of the sixth century the use of electrum spread widely in the west of Anatolia, being struck in a great variety of denominations down to minute pieces as small as $\frac{1}{96}$ of a stater; but the very small size of these coins must not be allowed to obscure the fact that, since the value of electrum was about ten times that of silver, even the smallest could not perform the function of small change in retail trade. The further spread of coinage was greatly stimulated by the adoption by the Lydian king Croesus of pure gold and pure silver in place of electrum, a practice continued by the Persians after their conquest of Lydia. Electrum was found naturally only in western Anatolia, and it had the disadvantage that the metallic composition – and hence the intrinsic value – could not be easily assessed; silver, on the other hand, could be mined in quantity at a number of places in the Aegean, and the value of any piece could be determined directly from its weight. Thus by the end of the sixth century, though Persia alone adopted gold, of which the Greeks long continued to make no use for coinage except in emergencies, silver was beginning to be more widely used. Some of the cities of Ionia, following their practice with electrum, produced tiny silver coins as small as a quarter of an obol; elsewhere, particularly in Caria, Rhodes and Cyprus, the production of large silver coins had begun before 500 BC.

During the fifth century the development of coinage in western Asia Minor was arrested. Most of the Greek cities were subject allies of the Athenians, who insisted on the use of Athenian coinage in all official transactions; only at such places as Chios and Samos, which, though allies of Athens, were powerful enough to maintain their independence, are silver coinages in major denominations to be found. Outside the area of Athenian control, however, coinage spread along the south coast of Asia Minor, where the dynasts of Lycia and Greek cities such as Aspendus, Celenderis, Side and Soli began substantial coinages for the first time. In the latter part of the century a new phenomenon is the minting of coinage by Persian satraps, usually for military purposes; in this same category can be included the coinages of the vassal kings of Tyre and Sidon in Phoenicia.

The extent to which Athenian policy had restricted coinage in western Asia Minor in the fifth century can be judged by the outburst of silver coinage which followed the removal of that restriction in the fourth century; the tetradrachm issues of Cyzicus, Clazomenae, Ephesus, Chios, Samos, Rhodes and Cos are only the more notable examples. In Cilicia the issues of Aspendus and the satrapal coinages of Tarsus, which was used as a mint even by satraps of other areas, were on a very large scale. There is also an increase in the use of gold coinage, though Lampsacus was the only Greek city to make regular issues.

The conquests of Alexander altered, together with much else, the whole development of ancient coinage. Not only was the use of coinage on the Greek pattern extended over a vastly greater area than hitherto, but an entirely new degree of uniformity in fabric, weight and types was imposed throughout his dominions. This uniformity, momentarily achieved, was impaired by the disintegration of his empire, though never wholly lost. The coinages of the Hellenistic kingdoms have a family likeness which stems from their common ancestry in the coinage of Alexander himself, which, through the Roman empire, formed the model of nearly all subsequent regal and imperial coinages.

In the continually fluctuating political pattern of the Hellenistic age the status of the great Greek cities of Asia Minor changed frequently: sometimes they formed part of one or another of the Hellenistic kingdoms, sometimes their independence was conceded. In the former case a city with an established mint might be required to produce a regal coinage, in the latter it often

asserted its independence by minting in the third century coins with the types of Alexander or Lysimachus, and in the second coins with local types, usually with a 'wreath-bearing' reverse.

Further east new kingdoms were established in the areas which slipped from the Seleucid grip: Bactria, Parthia, Armenia, Cappadocia and Commagene. In most of them Greek language and culture can have had only shallow roots, yet all minted coinages which were Greek in fabric, in language and in their types.

THE EARLIEST ISSUES

These primitive electrum pieces deserve close attention because they are the world's earliest coins; in them, as nowhere else, can be traced the development from weighed, but unmarked, lumps of metal, through roughly marked, but still typeless, pieces (no. 583, Pl. 177) to those which have types not only on the obverse, but in the sections of the reverses as well (no. 591, Pl. 178).

To establish the period at which this development was taking place is clearly of the greatest importance for it will constitute a *terminus post quem* for all other Greek coinages, which lack these early phases. Fortunately this can be done through the coins discovered in the excavations of the Artemisium at Ephesus. These were associated with numerous objects—pottery, jewelry, ivories—of which the latest, closing the deposit, belonged to the early sixth century; the coins, too, will come down to this date, and other derivative issues must be later still.

There are, however, many problems of attribution, for types are numerous, especially among the smaller denominations, and few pieces indeed are signed with the name of the issuing mint. Sometimes the type will help; no. 585 (Pl. 177) is reasonably attributed to Ephesus, where the stag was the beast of the huntress goddess, Artemis (nos 600, 601, Pl. 179); the lion with head reverted (no. 591, Pl. 178) is later a common type of Miletus, and the seal of no. 593 (Pl. 178) can only be a pun on Phocaea; but many others are far less explicit. For these an approximate attribution can be derived from the weight standards on which they are struck. The majority (nos 585–591, Pls 177, 178) are on a standard (stater about 14.25 gm.) shared between Miletus (no. 591, Pl. 178) and Lydia (no. 590, Pl. 178), so that unattributed coins on this standard can be assigned to south Ionia or Caria. Further north is another standard (stater about 16.50 gm.) used at Phocaea (no. 593, Pl. 178), while in between is the standard (stater about 17.20 gm.) used at Samos (no. 611, Pl. 182).

The metal employed is electrum, an alloy of gold and silver, which was originally washed from local alluvial deposits. When these were exhausted, the alloy was produced artificially, as we know from an early fourth century inscription regulating the electrum issues of Phocaea and Mytilene. Though these coins were accurately adjusted for weight, the proportion of the metals present, and consequently their intrinsic value, varies considerably. It is still not clear whether this variation was a deliberate device by the issuing authorities in order to save gold, or whether, since the two metals were not readily separable, electrum was accepted at a conventional rate regardless of the amount of gold in the individual piece.

These electrum coins of uncertain intrinsic value would not be accepted outside the area familiar with them as readily as would pieces of pure metal. In Lydia, therefore, in order to encourage relations with the Greek world, Croesus abandoned the traditional electrum (no. 590, Pl. 178) in favour of coins of pure gold (no. 584, Pl. 177) and silver. Coins of this latter type continued to be minted by the Persians, after they had conquered Lydia, until the distinctively Persian darics and sigloi were introduced late in the sixth century (nos 618, 619, Pl. 183). After the early fifth century at three mints only were there substantial electrum issues, at Phocaea (p. 355), Cyzicus (p. 368ff.) and Mytilene (p. 367f.), and these, too, were finally superseded by the coinages of Alexander the Great.

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Plate 177

583 UNCERTAIN MINT, c. 600 BC El. stater: 10.81 gm.

Obv. Rough striations. *Rev.* Three punch marks.

London; *PCG*, pl. 1, 1; *BMC Ionia*, p. 183, 1.

Note. This is a puzzling coin, because, though it does contain some gold, the proportion is unusually low; the weight standard is not that normally employed for electrum coins of this kind (as nos 586–591, Pls 177, 178), but is that used for

Lydian silver and for the succeeding Persian sigloi (no. 619, Pl. 182).

584 LYDIA, Croesus, 561–546 BC Gold stater: 8.05 gm.

Obv. Confronting foreparts of lion and bull. *Rev.* Two punch marks.

Paris.

585 IONIA, EPHEBUS, c. 600 BC El. trite: 4.75 gm.

Obv. Stag grazing; Φ ANEOΣ. *Rev.* Two punch marks. London (BM); *PCG*², pl. 51, 3; *ANS Centennial Publication*, p. 586, 3.

Note. This is the earliest inscribed issue known; the stater (*PCG*, pl. 1, 9) has the legend in the fuller form 'I am the badge of Phanes'. Phanes is otherwise unknown, but the stag suggests attribution to Ephesus.

586 IONIA, or CARIA, UNCERTAIN MINT, c. 550 BC

El. stater: 14.01 gm.

Obv. Two lions rampant, confronted. *Rev.* (not shown). Incuse square.

London (BM); *PCG*, pl. 1, 13.

587 IONIA, UNCERTAIN MINT, c. 550 BC

El. stater: 14.28 gm.

Obv. Forepart of goat. *Rev.* (not shown). Three punch marks, as no. 583.

London (BM); *PCG*, pl. 1, 8.

588 MILETUS, c. 575 BC El. stater: 14.19 gm.

Obv. Two lions' heads back to back. *Rev.* (not shown). Three punch marks.

Paris.

Plate 178

589 MILETUS(?), c. 575 BC El. stater: 13.93 gm.

Obv. Cow, with head turned back, suckling calf; above, flower; to r., branch. *Rev.* (not shown). Rectangular incuse. Munich.

590 LYDIA, Croesus, 561–546 BC El. stater: 13.96 gm.

Obv. Foreparts of lion and bull, back to back. *Rev.* (not shown). Three punch marks, as no. 583.

Munich.

591 MILETUS, c. 575 BC El. stater: 14.01 gm.

Obv. Lion with head reverted within rectangular border. *Rev.* Above, head of deer in square incuse; centre, fox in rectangular incuse; below, shaped incuse containing stellate pattern.

London (BM); *PCG*, pl. 1, 7.

592 SMYRNA(?), c. 575 BC El. stater: 16.09 gm.

Obv. Lion's head. *Rev.* (not shown). Square incuse.

London; *PCG*, pl. 1, 17; *BMC Ionia*, p. 9, 39 and p. 236, 1.

Note. This attribution is doubtful since Smyrna was destroyed c. 600 BC and was re-occupied only on a small scale subsequently.

593 PHOCAEA, c. 550 BC El. stater: 16.52 gm.

Obv. Seal; below, Θ (= Φ ?). *Rev.* (not shown). Two square punch marks of unequal size.

London; *PCG*, pl. 1, 10.

Note. The seal ($\varphi\acute{o}\kappa\eta$) is a pun on the city's name.

IONIA

The cities of Ionia, of which Athens claimed to be the mother-city, were settled from mainland Greece during the dark age which followed the collapse of the Mycenaean civilization. In the archaic age they enjoyed great prosperity from their geographical position as intermediaries between the inland kingdom of Lydia and the rest of the Greek world and Egypt. Being either islanders or coastal dwellers they ranged over the whole of the Mediterranean and the Black Sea, and by the end of the seventh century the Phocaeans are heard of as far west as Spain; in the course of these voyages they founded a number of colonies in the west Mediterranean, including Massalia (p. 318) and Hyele (p. 305f.). The Milesians, on the other hand, concentrated on the Black Sea where they planted numerous colonies (p. 335). Egypt was also a field for Ionian enterprise, for Chios, Teos, Phocaea, Clazomenae, Samos and Miletus all had a share in the trading station at Naucratis. In cultural matters, too, the Ionians ranked high; the Samians were skilled in various arts and crafts, and boasted an enormous temple of Hera; the temple of Artemis at Ephesus was one of the seven wonders of the world, and there was a famous oracle of Apollo at Didyma, near Miletus. In the fifth and fourth centuries the Ionian cities were subject to either Athens or Persia, and after the dissolution of Alexander's empire they played a part in the complicated history of the Hellenistic age, sometimes independent, sometimes subject to one or other of the contending kingdoms. Yet despite all vicissitudes, their prosperity was never seriously impaired, and they long remained among the greatest and wealthiest centres of population in the east Mediterranean.

Phocaea's coinage, from the sixth century to the fourth, consisted almost wholly of electrum sixths (nos 594–597, Pl. 179); staters are now extremely rare (no. 593, Pl. 178), but must once have been more common, since they are often mentioned in inscriptions and literature. The types of the sixths are very numerous, as at Cyzicus, and all have a seal as a symbol punning the name of the city. In the early fourth century Phocaea had an agreement with Mytilene whereby each issued electrum coins of a standard composition in alternate years only.

At Ephesus the coinage is dominated by the cult of Artemis who was identified with an Anatolian nature goddess; the bee belongs to the latter, while the stag was the creature of Artemis, the huntress. Ephesus issued little electrum (no. 585, Pl. 177), nor was her silver abundant before the fourth century. This was due in part to Athenian policy towards her allies, but also to the use of the Persian siglos (no. 619, Pl. 183) as the major silver currency of Ionia. In the fourth century, however, with the power of Athens curtailed and with Persia on the defensive, Ephesus struck a long and plentiful series of tetradrachms (no. 600,

Pl. 178). The importance of the siglos in this area is to be seen at Colophon also, where the fifth century coinage was struck on the Persian standard (no. 602, Pl. 180).

Throughout Ionia the restrictive policies of Athens during the fifth century resulted in small local coinages in low denominations only. Chios and Samos, however, were exceptions, for these two powerful islands, though allied to Athens, retained their political independence, and issued coinage freely for much of the fifth century. The types of Chios, the sphinx and the wine-amphora (nos 605, 606, Pl. 180) remained remarkably constant from the sixth century BC until Chian coinage ceased in the third century AD.

More interesting is the coinage of Samos, which can be related at several points to the history of the island. The sixth century coinage was nearly all of electrum (no. 611, Pl. 182), of which some pieces can be attributed to the late sixth century tyrant Polycrates, but at the very end of the century there begins a coinage of silver tetradrachms which were already familiar to the Samian refugees who settled at Zancle in 494 after the failure of the Ionian Revolt against Persia (see p. 285). There they minted coins of distinctively Samian type with a lion's scalp on the obverse, and the prow of a Samian warship on the reverse (no. 613, Pl. 182; cf. no. 614). After the Persian Wars the tetradrachms of Samos were marked on the reverse by changing symbols (no. 614, Pl. 182), until c. 454 BC when the reverse type was modified to show the forepart of a cow instead of the head only (no. 615, Pl. 182). Thereafter followed a sequence of annual issues each marked with a letter of the alphabet, until Samos revolted from Athens in 441 BC. The suppression of this revolt in 439 BC after a prolonged siege interrupted the Samian coinage until the last decade of the century, when Samos was again a loyal ally of Athens. At the beginning of the fourth century Samos was a member of an alliance which minted a distinctive series of coins (see note to no. 616, Pl. 183); at the same time coinage with native types was again being struck (no. 617, Pl. 183), which continued until the island was captured by Athens in 365 BC.

A much later phase of Ionian coinage is shown in nos 609, 610, Pl. 181, when in the second and first centuries BC there was adopted the wide-spread fashion of minting coins known as *stephanephoroi* ('wreath-bearers') from the wreath which always surrounds the reverse types; a similar group from somewhat further north are nos 723–725 on Pl. 200. The close relationship between the Apollo head at Colophon (no. 609, Pl. 181) and that at Myrina (no. 725, Pl. 200) is unmistakable. Similar *stephanephoroi* are found at Athens (nos 364–366, Pl. 120), Chalcis, Eretria (no. 373, Pl. 122), Macedonia (no. 578, Pl. 175) and elsewhere.

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Plate 179

594 PHOCAEA, c. 500 BC El. hekte: 2.60 gm.
Obv. Griffin's head; to r., seal. *Rev.* (not shown). Incuse punch mark.
 v. Aulock coll.; SNG 2117.

595 PHOCAEA, c. 520 BC El. hekte: 2.59 gm.
Obv. Female head wearing rosette ear-ring, necklace and hair band; to r., seal. *Rev.* (not shown). As no. 594.
 London; PCG, pl. 8, 11; BMC 1.

596 PHOCAEA, c. 480 BC El. hekte: 2.53 gm.
Obv. Female head wearing rosette ear-ring and necklace; hair in sphendone; to r., seal. *Rev.* (not shown). As no. 594.
 v. Aulock coll.; SNG 2120.

597 PHOCAEA, c. 500 BC El. hekte: 2.58 gm.
Obv. Head of man-faced bull; to r., seal. *Rev.* (not shown).
 As no. 594.
 Hess/Leu 4. 4. 1963, 70.

598 EPHEBUS, c. 520–500 BC Drachma: 3.49 gm.
Obv. Bee. *Rev.* Incuse square.
 Kricheldorf X, 90.
Note. Possibly not Ephesus; a north Greek attribution has been suggested (*NC* 1939, p. 6, no. 4).

599 EPHEBUS, c. 420–400 BC Didrachm: 7.64 gm.
Obv. Bee; *EΦ.* *Rev.* Incuse square.
 Priv. coll.

600 EPHEsus, c. 375–300 BC Tetradrachm: 15.10 gm.
Obv. Bee; *EΦ*. *Rev.* Forepart of stag with head reverted; to l., palm tree; to r., *ΗΓΕΚΛΗΣ*.
 Paris.

Note. The very large number of magistrates signing issues of this type suggests a period of issue throughout most of the fourth century.

601 EPHEsus, c. 258–202 BC Didrachm: 6.58 gm.
Obv. Head of Artemis, wearing stephane, with bow and quiver over l. shoulder. *Rev.* Forepart of stag with head reverted; to l., *ΣΩΣΙΣ*; to r., star; *EΦ*.
 London; *PCG*, pl. 34, 32; *BMC* 114.

Plate 180

602 COLOPHON, c. 480–470 BC Drachma: 5.39 gm.
Obv. Head of Apollo, laureate; *ΚΟΛΟΦΩΝΙΩΝ*. *Rev.* Lyre in incuse square.
 v. Aulock coll.; *SNG* 2000.

603 ERYTHRAE, c. 500 BC Didrachm: 7.07 gm.
Obv. Young horseman. *Rev.* (not shown). Incuse square.
 Berlin; Regling 164.

604 UNCERTAIN MINT, c. 450 BC El. hekte: 2.38 gm.
Obv. Head of Heracles in lion's skin. *Rev.* (not shown).
 Incuse square.
 Hess/Leu 4. 4. 1963, 81.

605 CHIOS, c. 400–350 BC Tetradrachm: 15.22 gm.
Obv. Sphinx; to l., pointed amphora and bunch of grapes.
Rev. Incuse square with striated field; on band, *ΒΑΣΙΛΕΙΑΗΣ*.
 Berlin; Regling 649. Baldwin 72.

606 CHIOS, c. 500–480 BC Didrachm: 7.76 gm.
Obv. As no. 605, but no grapes. *Rev.* (not shown). Incuse square.
 Berlin. Baldwin 19.

607 CLAZOMENAE, c. 500 BC Didrachm: 6.65 gm.
Obv. Forepart of winged boar. *Rev.* (not shown). Incuse square.
 Priv. coll.
Note. The attribution of these uninscribed coins to Clazomenae is not certain.

Plate 181

608 CLAZOMENAE, c. 375 BC Tetradrachm: 15.22 gm.
Obv. Facing head of Apollo, laureate; on l., *ΘΕΟΔΟΤΟΣ ΕΙΠΘΕΙ* (= 'Theodotos made (it)'). *Rev.* Swan with wings open; to l., *ΜΑΝΔΡΩΝΑΕ*; *ΚΛΑΖΟ*.
 Berlin.

609 COLOPHON, c. 175 BC Tetradrachm: 15.75 gm.
Obv. Head of Apollo laureate. *Rev.* Apollo standing holding

filleted laurel branch in r. hand, and resting l. on lyre; around, laurel wreath; *ΚΟΛΟΦΩΝΙΩΝ*.
 London (BM); *PCG*, pl. 39, 11. Milne 164.

610 MAGNESIA (on the Maeander), c. 150 BC
 Tetradrachm: 16.46 gm.
Obv. Head of Artemis wearing stephane, with bow and quiver over l. shoulder. *Rev.* Apollo, naked, holding filleted branch; at his side, tripod; below, maeander pattern; to l., *ΕΥΦΗΜΟΣ ΠΑΥΣΑΝΙΟΥ*; to r., *ΜΑΓΝΗΤΩΝ*; around, laurel wreath.
 London; *PCG*, pl. 40, 14; *BMC* 36.

Plate 182

611 SAMOS(?), c. 600 BC El. hemistater: 8.62 gm.
Obv. Lion's scalp facing. *Rev.* One oblong, one triangular punch mark.
 London; *PCG*, pl. 1, 5; *BMC* 1.

612 SAMOS(?), c. 500 BC El. stater: 14.06 gm.
Obv. Forepart of ox with head turned back. *Rev.* Incuse square.
 Paris.
Note. Coins of this class have sometimes been attributed to the various cities taking part in the Ionian Revolt against Persia, 500–494 BC. (Gardner, *History of ancient coinage*, Ch. III). Though the coins are not far from this date, no actual connexion with the revolt can be proved; for another coin of this group see Dardanus, no. 690, Pl. 196.

613 SAMIANS (at Zancle), 494–489 BC
 Tetradrachm: 17.04 gm.
Obv. Lion's scalp upon circular shield. *Rev.* Prow of warship.
 Berlin; Regling 167. Barron ZAI/ZPI (Pl. VI).
Note. Both weight standard and finds prove this to be a coin of Sicilian origin; it should be inserted in the Zancle-Messana series between nos. 49 and 50 on Pl. 16; see commentary on Zancle, p. 285.

614 SAMOS, c. 470 BC Tetradrachm: 12.84 gm.
Obv. Lion's scalp. *Rev.* Head of ox; to l., prow of warship (cf. no. 613).
 Berlin; Regling 166. Barron 34.

615 SAMOS, 454–453 BC Tetradrachm: 13.16 gm.
Obv. Lion's scalp. *Rev.* Forepart of ox with ornamental collar; to l., olive branch; *ΣΑ*.
 London; *PCG*, pl. 8, 29; *BMC* 82. Barron 67.

Plate 183

616 SAMOS, 394–393 BC Tridrachm: 11.02 gm.
Obv. Child Heracles strangling two snakes; *ΣΥΝ* (= *συνμυχή* 'alliance'). *Rev.* Lion's scalp; *ΣΑ*.
 Berlin; Regling 650. Barron 1 (f).
Note. Similar 'alliance' coins are known for Rhodes, Cnidus, Iasus, Ephesus, Byzantium and Cyzicus (no. 720, Pl. 200);

an anti-Spartan alliance in 394 BC has been championed by G. Cawkwell (*NC* 1956, pp. 69ff., and *JHS* 1963, pp. 152ff.), while J. M. Cook has proposed a pro-Spartan alliance in 391/390 BC (*JHS* 1961, pp. 66ff.). For the reverse type compare Croton no. 271 (Pl. 94) and Thebes no. 454 (Pl. 145).

617 SAMOS, 397–396 BC Tetradrachm: 15.29 gm.
Obv. Lion's scalp. *Rev.* Forepart of ox with collar; to l., olive branch; above, *AMΦI* engraved over *ΠΡΩΤΗΣ; ΣΑ*.
 Priv. coll. Barron 111.

THE PERSIAN EMPIRE

Until Alexander the Great imposed his imperial coinage upon all the territories that he had won, the greater part of the Persian Empire used miscellaneous bullion for its transactions; only in Anatolia, where contact with coin-using Greeks was close, did the Persian government find it desirable to conform to Greek practice by minting coins of their own. The first Persian-sponsored coinage, however, had nothing specifically Persian about it, for it was simply a continuation of the gold and silver issues, which the Persians found in production when they conquered the kingdom of Lydia in 546 BC (no. 584, Pl. 177). About thirty years later, under Darius I, the Lydian types were replaced by a distinctively Persian figure, variously armed, who is usually described as being the King of Persia himself, though this has been doubted (see *Note* to nos 618–620). Finds show that the use of the silver siglos or shekel (no. 619, Pl. 183) was confined to western Anatolia, where it was probably minted at the old Lydian capital of Sardis, and perhaps elsewhere, for a population accustomed to using Greek coins.

The gold daric (no. 618, Pl. 183), perhaps named from Darius himself, had a wider circulation in both the Greek and the Persian world, being the only substantial gold coinage in existence before that of Philip II of Macedon. Darics and sigloi are difficult to date individually for the types underwent only slight modification between the late sixth century and Alexander's conquest; it is certainly not possible, as was once thought, to discern in them the features of successive Persian kings. Side by side with his own Greek coinage, Alexander appears to have permitted a continuation in gold of the traditional Persian types, mostly in the form of double darics (no. 620, Pl. 183).

In addition to this imperial Persian coinage, satraps occasionally had coins bearing their own portraits struck for special purposes, usually when engaged in military operations (nos 621–623, Pl. 184). Particularly remarkable is no. 621, both for the quality of its portrait and for the manner in which its reverse copies the Athenian tetradrachm (*cf.* nos 359–363, Pl. 119), the commonest currency of the area. In all probability this was minted by Tissaphernes, satrap of the coastal provinces of Asia Minor, as a subsidy for the Spartan fleet in 412–411 BC; we know that this subsidy was reckoned in Attic drachmae (Thuc. VIII, 29). A further group of satrapal issues was minted for military purposes during the fourth century at various cities in Cilicia, especially Tarsus (see p. 362f.).

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Plate 183

618 PERSIA, c. 485–450 BC (?) Gold daric: 8.27 gm.
Obv. Persian wearing indented head-dress and carrying bow and spear. *Rev.* Incuse rectangle.
 London; *PCG*, pl. 1, 22; *BMC* 3.

619 PERSIA, c. 485–450 BC (?) Siglos (shekel): 5.22 gm.
Obv. and *Rev.* As no. 618.
 London; *PCG*, pl. 8, 2; *BMC* 56.

620 PERSIA, c. 330–300 BC Gold double daric: 16.71 gm.
Obv. As no. 618, but also quiver over l. shoulder; to l.,

ΦM (monogram) and satrap's tiara. *Rev.* Irregular incuse.
 London; *PCG*, pl. 27, 1; *BMC* 5.

Note. Probably minted at Babylon for circulation in the eastern half of Alexander's empire.

Note. to nos 618–620. The figure on the obverse is always described as being the king of Persia himself, though this has been doubted on the grounds that the head-dress is not that of a Persian king (Seyrig, *Syria* 1959, pp. 54ff., n. 5).

Plate 184

621 TISSAPHERNES, c. 412/11 BC Tetradrachm: 16.96 gm.
Obv. Head of Tissaphernes wearing tiara with ends hanging

loose. *Rev.* Owl; to l., crescent and olive sprig; *BAΣ* (= βασιλέως, 'of the king'); on owl, countermark containing Aramaic letter.

London; *PCG*², pl. 51, 4.

622 TISSAPHERNES, c. 400–395 BC Tetradrachm: 15.31 gm. *Obv.* As no. 621, but ends of tiara tied below chin. *Rev.* Lyre; *BAΣΙΑ*.

London; *PCG*, pl. 19, 41; *BMC Lydia*, p. 235.

623 PHARNABAZUS, c. 395/4 BC Tetradrachm: 14.92 gm.

Obv. Head of Pharnabazus wearing tiara with ends tied under chin. *Rev.* Persian wearing indented head-dress and carrying bow and spear (*cf.* note to nos 618–620 above); to l., warship; *BAΣΙΑΕΩΣ*.

Berlin; Regling 425.

Note to nos 621–623. The attributions and dates given are those proposed by Robinson in *NC* 1948, pp. 48ff. For another portrait of Pharnabazus, see Cyzicus no. 718 (Pl. 200).

CARIA

At the south-west corner of Asia Minor Caria includes a number of the neighbouring islands such as Rhodes and Cos; the original population seems to have been non-Greek, and they sometimes used a native alphabet (nos 636, 637, Pl. 187). A number of issues, while attributed to the area on good grounds, cannot be more precisely located; for example, no. 625, Pl. 185 may belong to a family of local dynasts at Mylasa. For nos 636, 637, Pl. 187, a Carian origin is indicated by a hoard found about 1935, though previously they had been attributed to various cities in Cilicia.

One of the principal series of the area was that of Cnidus (nos 626–634, Pls 185, 186), which throughout carried a lion on obverse, the beast of Apollo who had an important temple in Cnidian territory, which was the religious meeting place of a number of neighbouring states, including Cos (no. 639, Pl. 188). At Cos the obverse alludes to the games which took place at this temple of Apollo, the prize being a tripod (*Her.* I, 144). In 366 BC the people of Cos founded a new capital at the east end of the island to take advantage of the trade passing through the channel between Cos and the mainland; this new foundation prospered and minted tetradrachms as no. 640, Pl. 188.

From 395–334 BC the satraps ruling Caria for Persia were drawn from a family of Mylasa, of which the best known member was Maussollus, 377–353 BC; about 365 BC he moved his capital to Halicarnassus, where a magnificent tomb was erected for him (the Mausoleum) by his wife Artemisia after his death. The facing head of Apollo on the obverse of his coinage (no. 638, Pl. 187) was inspired by the similar head of Helios on the contemporary coinage of Rhodes (nos 644, 645, Pls 188, 189); the reverse shows Zeus of Labraunda carrying his distinctive attribute, the double axe.

From the beginning of the fourth century BC the most important coinage of Caria was that of Rhodes (nos 644–648). At an earlier date Rhodes had contained three independent cities, Lindus, Ialysus and Camirus (nos 641–643, Pl. 188), which had been allies of Athens throughout the fifth century. In 411 BC, however, they revolted from Athens, and a few years later co-operated in the foundation of a new federal capital bearing the same name as the island. The obverse of the coins of Rhodes was always the head of the sun-god, Helios, to whom the island was sacred; the earliest facing heads (nos 645, 646, Pl. 189) may have been immediately inspired by Cimon's head of Arethusa (nos 122, 123, Pls 44, 45), which could have become quickly known in the Aegean through the Syracusan contingent serving against Athens in the last years of the Peloponnesian War. On the reverse was always a rose, the flower from which the island was named. Slightly later versions of these types are seen at their best in the island's only issue of gold (no. 644, Pl. 188).

In the fourth and following centuries Rhodes managed to retain her independence, and became a major naval and commercial power; in these circumstances Rhodian silver coinage was one of the most important in the eastern Mediterranean, and ceased only when the island was captured by Rome in 43 BC. A curious appendix to the history of Rhodian coinage is that in the Middle Ages the radiate head of Helios was interpreted as the head of Christ in glory and the rose as the rose of Sharon; relics of such coins were sought after and treasured as the thirty pieces of silver paid to Judas Iscariot.

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Plate 185

624 UNCERTAIN MINT, c. 520 BC Stater: 14.50 gm.
Obv. Triskeles of three foreparts of winged lions. *Rev.* (not shown). Triskeles of human legs in triangular incuse.
Berlin; Regling 53. From Demanhur hoard.

Note. The attribution of this coin to Caria is not confirmed; the weight standard does not suit the area. The Thracio-Macedonian region is a possibility.

625 MYLASA (?), c. 500 BC Stater: 11.05 gm.
Obv. Forepart of lion; on shoulder symbol of sovereignty(?).
Rev. (not shown). Incuse square divided into two oblongs.
Berlin; Regling 70.
Note. This attribution is due to Robinson, NC 1961, pp. 114ff.

626 CNIDUS, c. 520 BC Stater: 11.70 gm.
Obv. Head of lion. *Rev.* Head of Aphrodite, wearing ear-ring, hair in saccos; all in incuse square.
London; PCG, pl. 2, 34. Cahn 24.

627 CNIDUS, c. 530 BC Trihemiobol.
Obv. Head of lion. *Rev.* Head of Aphrodite in incuse square with dotted border.
Priv. coll. Cahn 1.

628 CNIDUS, c. 510 BC Drachma: 6.18 gm.
Obv. Forepart of lion. *Rev.* As no. 626.
Berlin; Regling 78. Cahn 33.

Plate 186

629 CNIDUS, c. 455 BC Drachma: 6.18 gm.
Obv. Forepart of lion. *Rev.* Head of Aphrodite wearing ear-ring and necklace; hair in queue.
Priv. coll. Cahn 75.

630 CNIDUS, c. 455 BC Drachma: 6.26 gm.
Obv. Forepart of lion. *Rev.* Head of Aphrodite wearing pendent ear-ring and necklace; ampyx in hair.
London; BMC 12. Cahn 77.

631 CNIDUS, c. 480 BC Drachma: 5.98 gm.
Obv. and *Rev.* As no. 630.
v. Aulock coll.; SNG 2597. Cahn 56.

632 CNIDUS, c. 395 BC Drachma: 6.20 gm.
Obv. Forepart of lion. *Rev.* Head of Aphrodite; hair in sphendone; *KNI*.
London (BM); PCG, pl. 9, 33. Cahn 115.

633 CNIDUS, c. 350 BC Didrachm: 7.44 gm.
Obv. Head of Aphrodite with hair in sphendone; to l., prow of ship; *KNI*. *Rev.* Forepart of lion; to r., cantharus; *ΠΕΙΣΙΣΤΡΑΤΟΣ*.
v. Aulock coll.; SNG 2601.

634 CNIDUS, c. 300–250 BC Tetradrachm: 13.82 gm.
Obv. Head of Aphrodite with hair gathered in knot; to l., *TE* (monogram). *Rev.* Forepart of lion; to r., *TEΛΕΣΙΦΩΝ*; *KNI*.
London (BM); PCG, pl. 28, 29.

Plate 187

635 TERMERA, Tymnes, c. 490–480 BC Drachma: 4.69 gm.
Obv. Heracles, wearing lion skin, kneeling with bow in l. hand, club in r., and sword at side; *TYMNO*. *Rev.* Lion's head; *ΤΕΡΜΕΡΙΚΟΝ*.
London; PCG, pl. 9, 31; BMC 2.

Note. The identity of this ruler is somewhat uncertain. Herodotus (V, 37) mentions a certain Histiaeus, son of Tymnes of Termera in 500 BC, and this same Histiaeus accompanied Xerxes' expedition as a famous captain in 480 BC (Her. VII, 98). The coin is hardly earlier than 500 BC, so that we must suppose either that Tymnes continued in power until about 480, or that the coin names a grandson (otherwise unknown) who ruled at Termera in the years immediately after 480.

636 UNCERTAIN CARIAN, c. 450–430 BC Stater: 11.53 gm.
Obv. Nike carrying wreath and caduceus. *Rev.* Incuse square containing pyramid flanked by Carian letters ∇ and Γ .
v. Aulock coll.; SNG 2350.

637 UNCERTAIN CARIAN, c. 450–430 BC Stater: 11.55 gm.
Obv. As no. 636. *Rev.* Pyramid with loops at apex; on l. and r., bird-like figures; above, Carian letter ∇ ; all in incuse square.
Berlin; Regling 272.

Note. Robinson, NC 1936, pp. 265ff., convincingly argues in favour of a Carian as against a Cilician origin.

638 CARIA, Maussollus, 377–353 BC
Tetradrachm: 15.25 gm.
Obv. Facing head of Apollo, laureate. *Rev.* Zeus Labraundos holding spear and double axe; to l., *ME* (monogram); *MAYΣΣΩΛΛΟΥ*.
v. Aulock coll.; SNG 2358.
Note. Minted at Halicarnassus, to which he transferred his capital from Mylasa c. 365 BC.

Plate 188

639 COS, c. 450 BC Tridrachm.
Obv. Youth throwing discus; to l., tripod; *ΚΟΣ*. *Rev.* Crab in centre of incuse square; field striated.
Athens.

Note. Cos belonged to the Dorian Pentapolis, the members of which celebrated games in honour of the Triopian Apollo; the prize was a tripod (Her. I, 144). These coins are usually described as Attic tetradrachms, though their weight is somewhat light for this denomination (9 examples, from 15.88–16.88 gm.); they are probably tridrachms of Persian weight equal to three sigloi.

640 COS, c. 350 BC Tetradrachm: 15.29 gm.
Obv. Head of Heracles, bearded, wearing lions' skin. *Rev.* Crab; below, club and *ΝΕΣΤΟΠΙΔΑΣ* above, *ΚΩΙΟΝ*; all in square dotted border.
v. Aulock coll.; SNG 2748.

641 LINDUS (on Rhodes), c. 500 BC Stater: 13.26 gm.
Obv. Lion's head. *Rev.* Dolphin; below, pellet; *ΛΙΝΔΙΟΝ*; all in incuse square.
Paris.

642 IALYSUS (on Rhodes), c. 500 BC Stater: 14.08 gm.
Obv. Forepart of winged boar; below, rose bud. *Rev.* Eagle's head; *ΙΑΛΥΣΙΟΝ*.
 v. Aulock coll.; SNG 2773.

Note. There is some doubt about the authenticity of this coin. Of this type two specimens are certainly ancient and share a reverse die; one has been at Glasgow since the eighteenth century (Hunter II, pl. LIV, 19), and the other is Jameson 1561 (now Oxford). Others such as no. 642 and SNG III (Lockett), 2936 may be modern copies.

643 CAMIRUS (on Rhodes), c. 520 BC Stater: 11.94 gm.
Obv. Fig leaf. *Rev.* Incuse square divided into two oblongs. Paris.

644 RHODES, c. 375 BC Gold stater: 8.59 gm.
Obv. Facing head of Helios. *Rev.* Rose; to r., rose bud; to l., bunch of grapes and *E*; *ΡΟΔΙΟΝ*.
 London; PCG, pl. 19, 45; BMC 10.
Note. *Rhodos* is the Greek for a rose, which was, therefore, adopted as the device of the city.

Plate 189

645 RHODES, c. 375–350 BC Tetradrachm: 15.14 gm.
Obv. As no. 644. *Rev.* (not shown). Rose; to r., caduceus; to l., rose bud and *T*; *ΡΟΔΙΟΝ*.
 v. Aulock coll.; SNG 2788.

646 RHODES, c. 408–400 BC Tetradrachm: 16.67 gm.
Obv. As no. 644. *Rev.* Rose; on l. and r., vine tendril and grapes; *ΡΟΔΙΟΝ*.
 Berlin; Regling 448.

647 RHODES, c. 300–250 BC Tetradrachm: 13.33 gm.
Obv. Facing head of Helios, radiate. *Rev.* Rose; on l., skyphos; on r., rose bud; above, *AETIΩΝ*; *ΡΟ*.
 Priv. coll.

648 RHODES, c. 88–43 BC Trihemidrachm: 4.19 gm.
Obv. As no. 647. *Rev.* Open rose; below, ear of barley; above, *ΚΡΙΤΟΚΑΛΗΣ*; *ΡΟ*.
 Priv. coll.

LYCIA

The mountainous character of Lycia long enabled its population not only to preserve their language, alphabet and culture, but also to escape effective domination by foreign powers. The cities of Lycia were ruled in the fifth and fourth centuries by the dynasts whose names appear on their coins, and who were united in a federal organization, of which the frequent three or four-hooked object (nos 649, 651, Pl. 190), perhaps a sun-symbol, seems to be the badge.

Though the names of the dynasts may be Lycian, Persian (Mithrapata, nos 656–658, Pl. 191) or Greek (Pericles, nos 659, 660, Pl. 191), their coinage is wholly Greek in fabric and very largely Greek in its types, which constitute one of the most remarkable and varied groups in the east Mediterranean. Among the earlier issues animal types, especially the boar, are most usual, but from the middle of the fifth century human heads are frequently found as well. Coin types from other areas often provided the models; nos 652 rev. and 653 obv. (Pl. 190) were clearly inspired by Athenian tetradrachms (nos 359–363, Pl. 119); the forepart of a lion (no. 655, Pl. 190; no. 656, Pl. 191) was derived from neighbouring Caria (nos 629–634, Pl. 186) and the lion's scalp (no. 657, Pl. 191) from Samos (no. 617, Pl. 183), although it is not yet clear why this Samian type should have become so popular in Lycia in the fourth century.

In recent years a remarkable find from Lycia itself has brought to light a whole range of fourth century issues previously quite unknown (nos 655–660, Pls 190, 191). The reverse of no. 655 (Pl. 190) is yet another example of the wide-spread influence of the Syracusan masters of the late fifth century; so close is its relation to the Athena head of Eucleidas (no. 111, Pl. IV), that one is tempted to wonder whether Eucleidas himself may not have sought refuge at the court of a Lycian dynast, when the Carthaginians over-ran most of Sicily. Nos 656–660 (Pl. 191) are notable additions to the list of surviving fourth century portraits, for the absence of divine attributes suggests that these are men rather than gods. The identity of the warrior on the reverses of nos 659, 660 (Pl. 191) is uncertain, but may perhaps be either Glaucus or Sarpedon, the heroes who led the Lycians in the Trojan War, and who may have been claimed as ancestors by the Pericles who united much of Lycia under his rule in the first half on the fourth century. The vigorous action of the warrior strongly recalls the figures from the frieze of the Mausoleum at Halicarnassus (R. Lullies and M. Hirmer, *Greek Sculpture*, Pls 202, 203). This native Lycian coinage came to an end about 362 BC, when the area was added to the province of Maussollus, satrap of Caria.

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Plate 190

649 LYCIA, Kuprlli, c. 460 BC Stater.

Obv. Forepart of griffin. *Rev.* Lycian triskeles and KOII in incuse square with dotted border.

Priv. coll.

650 LYCIA, c. 470 BC Stater: 9.35 gm.

Obv. Boar. *Rev.* Triskeles of cocks' heads in incuse square with dotted border.

Hess/Leu 7. 4. 1960, 228.

651 LYCIA, Tethiveibi, c. 460 BC Stater: 9.79 gm.

Obv. Female head wearing looped ear-ring and necklace. *Rev.* Lycian tetraskes and name of dynast in Lycian script within incuse square with dotted border.

London; PCG, pl. 9, 38; BMC 89.

652 LYCIA, Kharai, c. 430 BC Tetrobol: 3.22 gm.

Obv. As no. 651, but on r., flower. *Rev.* Owl; on l., monogram (?); on r., name of dynast in Lycian script.

v. Aulock coll.; SNG 4170.

653 LYCIA, Kharai, c. 430 BC Drachma: 4.13 gm.

Obv. Head of Athena wearing wreathed and crested helmet.

Rev. Head of satrap (Kharai?) wearing tiara with ends loose; name of dynast in Lycian script.

v. Aulock coll.; SNG 4176.

654 LYCIA, mint of Telmessus, c. 400 BC Stater: 8.46 gm.

Obv. Head of Athena wearing crested Attic helmet. *Rev.* Head of bearded Heracles wearing lion skin; Telebehihe in Lycian script (= Telmessus).

London; PCG, pl. 9, 41; BMC 127.

655 LYCIA, Vekhssere, c. 400–380 BC Stater: 9.89 gm.

Obv. Forepart of lion; NA in Lycian script. *Rev.* Facing head of Athena wearing crested helmet with cheek pieces raised; name of dynast in Lycian letters.

Hess/Leu 12. 4. 1962, 312.

Note. The reverse type is a copy of Euclidas' head of Athena at Syracuse, nos 111 and 112 (Pls IV and 39).

Plate 191

656 LYCIA, Mithrapata, c. 380–360 BC Stater: 9.77 gm.

Obv. As no. 655. *Rev.* Head of Mithrapata; to r., Lycian triskeles; name of dynast in Lycian script.

Oxford.

657 LYCIA, Mithrapata, c. 380–360 BC Stater.

Obv. Lion's scalp. *Rev.* As no. 656.

Priv. coll.

658 LYCIA, Mithrapata, c. 380–360 BC Stater.

Obv. (not shown) and *Rev.* As no. 656.

Priv. coll.

659 LYCIA, Pericles of Antiphellus, c. 380–360 BC

Stater: 9.73 gm.

Obv. (not shown). As no. 660. *Rev.* Bearded warrior, naked but for crested Corinthian helmet, carries shield on l. arm and sword in raised r.; to r., Lycian triskeles; name of Pericles in Lycian script.

Hess/Leu 2. 4. 1958, 227.

660 LYCIA, Pericles of Antiphellus, c. 380–360 BC

Stater: 9.85 gm.

Obv. Bearded head facing. *Rev.* As no. 659, but rough ground and plants are shown; to r., star.

Käppeli coll., Basle (*Kunstwerke der Antike*, no. 77).

Note. This coin is overstruck upon a stater of Evagoras I of Salamis, 411–373 BC, as no. 678 (Pl. 194); see *Schw. Münzbl.* 1964, pp. 135ff.

Note to nos 655–660. These coins all come from the remarkable hoard discovered near Elmalı in Lycia about 1957; they have been discussed by Jenkins, *NC* 1959, pp. 33ff. and Le Rider, *Rev. Num.* 1961, pp. 18ff. Most of these types were unknown before the discovery of this hoard.

PAMPHYLIA CILICIA

Along the south coast of Asia Minor were a number of more or less Hellenized cities all subject to the Persian Empire, although two of them, Aspendus and Celenderis make a brief appearance in the Athenian tribute lists. Nowhere along this coast does coinage begin before the second quarter of the fifth century, and at most places there was little before the fourth century, when the cities of Cilicia began to produce major coinages on behalf of Persian satraps; the military purpose of these coinages is often made explicit by their types, especially at Aspendus and Tarsus.

The two principal mints of Pamphylia were Side and Aspendus, of which the latter was usually the more important. The coins of Side always bore the punning device of a pomegranate (nos 661, 662, Pl. 192), whereas Aspendus from about 400 BC issued a long series showing on the reverse a slinger; this type may have been chosen because the Greek word for a slinger has some resemblance to the name of the town. At Aspendus the triskelis was a local badge (nos 663, 664, Pl. 192), and had always formed the reverse type during the fifth century.

Further east in Cilicia there was little coinage during most of the fifth century except at Celenderis. Until the last years of the century Cilicia seems usually to have been ruled by a native king as a vassal of Persia; from about 400 BC, however, he was replaced by a Persian satrap. From this time a number of Cilician cities were required on occasion to coin on behalf of the



satraps, though in the intervals they may have minted in their own names. The most important mint was certainly Tarsus (nos 673, 674, 676, Pl. 194). the coins of which were often inscribed with the satrap's name in Greek or Aramaic (no. 676). Greek and Persian elements are often fused in the coin types of this area; particularly popular is the seated or standing Zeus (or Baal), whose close connexion with agricultural fertility (grapes or corn-ears) is an oriental feature (no. 676, Pl. 194); on no. 673 (Pl. 194) the plough is guided by a Persian satrap, as he marks the boundaries of a new city, and on the reverse the cow and calf are protected by the winged disk of Ahuramazda. The last satrap was Mazaeus, who surrendered Cilicia to Alexander the Great, and whose prolific coinage (no. 676, Pl. 194) prompted the choice of a seated Zeus for the reverse of Alexander's tetradrachms (no. 569, Pl. 172).

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Plate 192

661 SIDE, c. 460 BC Stater: 10.96 gm.
Obv. Pomegranate. *Rev.* Incuse square containing head of Athena wearing Corinthian helmet.
London (BM); *PCG*, pl. 2, 41.
Note. Σίδη is the Greek for a pomegranate, which was, therefore, chosen as the city's badge.

662 SIDE, c. 205–188 BC Tetradrachm: 16.97 gm.
Obv. Head of Athena wearing crested Corinthian helmet.
Rev. Nike holding wreath; to l., pomegranate and ΔΙΟΔ.
Priv. coll.
Note. On this issue see H. Seyrig, 'Monnaies hellénistiques', *RN* 1963, pp. 57ff.

663 ASPENDUS, c. 400 BC Stater: 10.81 gm.
Obv. Two youths wrestling. *Rev.* Slinger wearing chiton; to r., triskeles of human legs; ΕΣΤΦΕΛΙΙΥΣ (local name of Aspendus); all in incuse square with dotted border.
Hess/Leu 12. 4. 1952, 314.

664 ASPENDUS, c. 375 BC Stater: 10.91 gm.
Obv. and *Rev.* As no. 663, but below triskeles, sling stone (?).
Priv. coll.

665 ASPENDUS, c. 275–250 BC Stater: 10.36 gm.
Obv. As no. 663, but in field, ΠΟ. *Rev.* As no. 663, but to r., forepart of horned horse and star.
Paris.

Plate 193

666 MALLUS, c. 375 BC Stater: 10.13 gm.
Obv. Head of Aphrodite, wearing ear-ring and necklace, with hair in sphendone. *Rev.* Head of satrap wearing necklace and tiara with ends tied under chin; ΜΑΑ.
Hess/Leu 12. 4. 1962, 325.

667 MALLUS, c. 375 BC Stater: 10.50 gm.
Obv. Head of Cronus, diademed. *Rev.* Demeter holding

lighted torch and ear of barley; to l., grain of barley; ΜΑΑ.
Berlin; Regling 607.

668 NAGIDUS, c. 360 BC Stater.
Obv. Aphrodite, with hair in sphendone, sits holding patera; Eros flies to crown her. *Rev.* Dionysus holding thyrsus and bunch of grapes; on l., Α; ΝΑΓΙΔΕΩΝ; above, bull in rectangular countermark.
v. Aulock coll. Lederer 41.

669 NAGIDUS, c. 350 BC Stater.
Obv. As no. 668, but Aphrodite wears polos, and beneath throne, mouse. *Rev.* As no. 668, but l., ΖΩ (monogram), lion's head, and ΗΘΑ; ΝΑΓΙΔΙΚΟΝ.
v. Aulock coll. Cf. Lederer 51.

670 APHRODISIAS, c. 375 BC Stater: 9.88 gm.
Obv. Athena Parthenos facing, wearing triple crested helmet and aegis; her r. hand supported by olive tree, her l. by shield; Nike flies to crown her. *Rev.* Aphrodite, wearing polos and holding flower, seated between two sphinxes.
London; *PCG*, pl. 19, 48; *BMC* 15 (Nagidus).

Plate 194

671 CELENDERIS, c. 410–400 BC Stater.
Obv. Young naked horseman, carrying whip, dismounting.
Rev. Kneeling goat with head turned back; ΚΕΑ.
v. Aulock coll.

672 CELENDERIS, c. 410–400 BC Stater: 10.09 gm.
Obv. and *Rev.* As no. 671.
Hess/Leu 12. 4. 1962, 320.

673 TARSUS, c. 400–380 BC Stater.
Obv. Satrap, wearing tiara, ploughing with yoke of oxen; TRS (= Tarsus) in Aramaic script. *Rev.* Cow suckling calf; above, winged sun disk.
v. Aulock coll.

674 TARSUS, c. 400–380 BC Stater: 10.00 gm.

Obv. Athena seated, holding spear in r. hand, and resting l. arm on shield; to r., olive tree. *Rev.* Kneeling girl playing with knuckle bones; to r., rose; *TEPΣIKON*.

Hess/Leu 12. 4. 1962, 324.

675 SOLI, c. 350 BC Stater: 10.67 gm.

Obv. Head of Athena wearing crested Attic helmet with griffin on bowl. *Rev.* Vine branch with bunch of grapes and leaf; to r., *HP* (monogram); *ΣΟΛΕΩΝ*.

Berlin; Regling 610.

676 TARSUS, Mazaeus, 361–333 BC Stater.

Obv. Baal (= Zeus) of Tarsus seated on throne holding sceptre in l., and grapes and corn ear in r.; below throne, symbol of sovereignty (*cf.* nos 625 and 677); on r., *BAALTRS* (= Baal of Tarsus) in Aramaic script. *Rev.* Lion attacking stag; above, Mazaeus in Aramaic script; below, Aramaic letter M; all within square dotted border.

v. Aulock coll.

Note. The obverse of such satrapal issues provides the prototype for the reverse of the silver coins of Alexander the Great, nos 569 and 572 (Pls 172 and 173).

CYPRUS

Cyprus is one of those areas, like Lycia or Crete, the coinage of which retains a distinctly local character. Except for a few on the southern coast of Asia Minor, Cypriot coins are rarely found outside the island, and their local air is intensified by the retention on some issues of the local script (nos 677, 678, Pl. 194). This syllabic script containing about sixty signs was a survival from the Bronze Age and was not well adapted to expressing the Greek language; for example, the word βασιλέως ('of king') had to be rendered pa . si . le . vo . se. Amid the predominantly Greek cities, Citium was ruled by Phoenician dynasts who inscribed their coins in Aramaic.

Salamis became politically important under the rule of Evagoras I, 411–374 BC (no. 678, Pl. 194), who with Athenian support attempted to promote the Hellenic cause in Cyprus. From about 390–381 BC he attained considerable success, winning part of the Cilician coast, capturing Tyre and dominating Phoenicia; he was, however, checked by the Persian satrap Tiribazus, for whose troops the Cilician mints struck considerable quantities of coinage.

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Plate 194

677 SALAMIS, 'Euelthon', c. 480–460 BC Stater: 10.98 gm.

Obv. Recumbent ram; name of Euelthon in Cypriot syllabic script. *Rev.* Symbol of sovereignty, *crux ansata* (*cf.* nos. 625 and 676), in incuse square; in each corner, floral motif. London; *PCG*, pl. 9, 47; *BMC* 26.

Note. Salamis was ruled by King Euelthon c. 525 BC (Her. IV, 162), but this coin can hardly be as early as his reign; either the name of the founder of the dynasty was retained on the coinage of his successors, or we have here to do with a descendant bearing the same name.

678 SALAMIS, Evagoras I, 411–373 BC Stater: 11.12 gm.

Obv. Bearded head of Heracles wearing lion's skin; name of Evagoras in Cypriot script. *Rev.* Recumbent goat; above, grain of barley; *ΒΑΣΙΛΕΩΣ* (in Cypriot script), *EYA*.

London; *PCG*, pl. 20, 53; *BMC* 55.

Note. A coin of this type was overstruck by the Lycian dynast Pericles (no. 660, Pl. 191).

Plate 195

679 SALAMIS, Evagoras II, 361–351 BC Gold stater: 8.33 gm.

Obv. Eagle standing on back of lion; above, star with sixteen rays (= the sun?); *BA*. *Rev.* Head of city goddess wearing turreted crown; *EYA*.

Hess/Leu 12. 4. 1962, 339.

680 SOLI, c. 325–300 BC Gold twelfth of a stater: 0.64 gm.

Obv. Head of Apollo, laureate; to r., Cypriot letter (na?). *Rev.* Head of Aphrodite; to r., Cypriot letter pa (? = first syllable of βασιλέως).

Münz. u. Med. Basel XIX, 515.

PHOENICIA

From the ancient cities of Tyre and Sidon came one of the greatest seafaring peoples of antiquity, who ranged over the whole Mediterranean, founding Carthage traditionally in the ninth century BC. Despite their trading interests, however, Phoenician coinage does not begin before the second quarter of the fifth century; at this time Phoenicia was part of the Persian Empire,

for which it provided the naval force in the east Mediterranean. Consequently it is no surprise to find a strong marine theme running through Phoenician coin types: at Tyre, a dolphin or Melcarth riding over the waves (nos 681, 682, Pl. 195); at Sidon and Byblos, heavily armed warships (nos 683–685, Pl. 195). The payment of the fleet may well have been one of the principal uses to which these coins were put; it is perhaps no coincidence that Phoenician coinage begins just about the time when Persia abandoned aggressive war against the Greeks, which could be financed on plunder, and fell back on the defensive, for which more regular terms of service and payment were required.

The reverses illustrate the Egyptian cultural influences to which Phoenicia had long been subject. At Tyre the owl carries Egyptian symbols of sovereignty (nos 681, 682, Pl. 195), and the king of Sidon wears an Egyptian crown as he follows the sacred chariot of his god (nos 683, 684, Pl. 195). At Byblos the lion attacking a bull (no. 685, Pl. 195) is a popular oriental motif, found on the stairway to the audience hall of Darius I and Xerxes at Persepolis, and, with a stag in place of the bull, on the satrapal coinage of Tarsus (no. 676, Pl. 194).

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Plate 195

681 TYRE, c. 460 BC Shekel: 13.53 gm.

Obv. Dolphin leaping over waves; in ex., murex. *Rev.* Owl of Egyptian type, crowned with crescent, carrying crook and flail; all in shaped incuse.

Münz. u. Med. Basel XIX, 556.

682. TYRE, c. 380 BC Shekel: 13.37 gm.

Obv. Melcarth, carrying bow, riding on hippocamp over waves; in ex., dolphin. *Rev.* As no. 681, but without crescent and shaped incuse.

London (BM).

683 SIDON, c. 450 BC Double-shekel: 28.43 gm.

Obv. Warship under full sail, the sides hung with round shields; on the stern, standard; below, waves. *Rev.* Image of Baal with driver in car drawn by three horses; above, in sunk area, forepart of wild goat with head reverted; all in incuse square.

Hess/Leu 16. 4. 1957, 302.

684 SIDON, c. 375 BC Double-shekel: 26.97 gm.

Obv. Warship, lined with shields, propelled by oars; on stern, standard surmounted by globe and crescent; below, waves; above, Phoenician letter *beth*. *Rev.* As no. 683, but no forepart of goat above; behind, as priest, walks king of Sidon in Egyptian dress, carrying censer in shape of horned animal's head.

Münz. u. Med. Basel XIX, 554.

Note. This interpretation of the reverses of nos 683, 684 is that proposed by H. Seyrig, *Syria*, 1959, pp. 52ff.

685 BYBLOS, Adramelek, c. 360–340 BC Shekel: 13.19 gm.

Obv. Galley with lion's head as figure-head, manned by three hoplites wearing crested helmets and carrying round shields; below, hippocamp and murex; in field *AD* in Phoenician script. *Rev.* Lion attacking bull; *Adramelek melek Gebal* (= Adramelek, king of Byblos) in Phoenician script. London (BM); *PCG*², pl. 51, 7.

NORTHERN ASIA MINOR AND UNCERTAIN ISSUES

While the attribution of no. 686 must remain uncertain, no. 687 should probably be given to Caria or to a neighbouring island. The pattern of reverse punches is unusual, but can be paralleled on two other issues; one with a crab on obverse can be assigned to Cos (*cf.* nos 639, 640, Pl. 188), while the other has a female head, which could be given to Cnidus. The weight standard in each case is Aeginetan, which is found in Caria and on Rhodes, but not further north on the Anatolian coast.

Sinope at the centre of the south shore of the Black Sea was a Milesian colony, and in turn the founder of numerous other colonies. It was an important trading centre, which became in the fourth century the seat of Persian satraps, whose names in Aramaic replaced that of Sinope on coins such as no. 689 (Pl. 196).

The normal type of Dardanus, from which the Dardanelles takes its name, was a cock (no. 691, Pl. 196), and for this reason the electrum stater no. 690 has also been attributed to Dardanus. It belongs to a group of coins of common fabric but varying types, which have often been connected with the Ionian revolt from Persia 500–496 BC (*cf.* no. 612, Pl. 182). Although the coins must be of about this date, proof of connexion with the revolt itself is lacking.

Colchis at the east end of the Black Sea was a terminal of a trade route from Central Asia.

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Pl. 196

686 UNCERTAIN, c. 550 BC El. stater: 8.04 gm.

Obv. Facing head of Gorgon. *Rev.* Stellate pattern within shaped incuse.

London; *PCG*, pl. 1, 3; *BMC Ionia*, p. 13, no. 58.

Note. Sometimes attributed to Parium in Mysia, sometimes to the coast of Thrace, the origin of this issue remains uncertain.

687 CARIA, uncertain mint, c. 550 BC Stater: 11.74 gm.

Obv. Forepart of horse. *Rev.* A large incuse square containing a quadruple floral design; a small incuse square divided diagonally.

Berlin; Regling 69.

Note. Though sometimes attributed to Cyme in Aeolis, the weight standard, the floral reverse and other considerations favour a Carian origin.

688 SINOPE, c. 500–450 BC Drachma: 6.08 gm.

Obv. Crude eagle's head; below, dolphin. *Rev.* Two deep squares each containing a pellet; one shallow square granulated.

Berlin; Regling 56.

Note. A difficult coin to date; the sophistication of the

reverse suggests that this is a barbarous imitation rather than a truly primitive coin.

689 SINOPE, c. 400–380 BC Drachma: 5.73 gm.

Obv. Head of nymph Sinope, with hair in sphendone. *Rev.* Sea-eagle on back of dolphin; ΣΙΝΩ.

London; *PCG*, pl. 8, 16; *BMC* 6.

690 DARDANUS, c. 500 BC El. stater: 13.92 gm.

Obv. Cock; above, palmette. *Rev.* Incuse square.

Berlin; Regling 153.

Note. Sometimes attributed to the Ionian Revolt, compare Samos(?), no. 612 (Pl. 182).

691 DARDANUS, c. 470–450 BC Drachma: 4.71 gm.

Obv. Young naked horseman. *Rev.* Cock; above, ΖΗ (monogram); ΔΑΡ.

London; *PCG*, pl. 8, 19; *BMC* 1.

692 COLCHIS, c. 480 BC Stater: 10.40 gm.

Obv. Feline, with body of lioness and head of lion, springing, with head reverted. *Rev.* Minotaur kneeling within oblong incuse.

Berlin; Regling 280.

LESBOS TENEDOS

Mytilene on Lesbos was one of the three principal mints for electrum coinage, functioning from the early fifth century until the time of Alexander the Great with only a short interruption after 427 BC, when Mytilene unsuccessfully attempted to revolt from Athens. Throughout this period the hekta (as no. 695, Pl. 197) was the normal denomination, though a single stater (no. 696, Pl. 197) has survived; the very low gold content, and the exceptionally explicit declaration of origin suggest that this was an emergency issue connected with the rising of 427 BC. In the late fifth and early fourth centuries Mytilene had an agreement with Phocaea (*cf.* nos 594–597, Pl. 179) whereby each coined in alternate years with an alloy of agreed composition. The types of the hektai are extremely varied. Down to about 450 BC animals predominate and the reverse type is intaglio; thereafter a male or female head occupies the obverse, and a type in relief the reverse. The artistic quality is always extremely high.

The explanation of the types of Tenedos (no. 697, Pl. 197) is disputed, though the double-axe, associated with grapes, may be a cult-object of Dionysus, as it was at Pherae (see note to no. 471, Pl. 149).

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Plate 197

693 LESBOS, c. 480–400 BC Billon stater: 14.41 gm.
Obv. Gorgoneion. *Rev.* (not shown). Incuse square.
Berlin; Regling 159.

694 LESBOS, c. 480–400 BC Billon stater: 11.20 gm.
Obv. Two calves' heads confronted; between, olive branch.
Rev. (not shown). Incuse square.
Berlin; Regling 158.
Note. The minting of base silver, which can have had a local token value only, is very unusual at such an early date; the exact period of issue is hard to define.

695 MYTILENE, c. 450–427 BC El. hekate: 2.50 gm.
Obv. Female head facing. *Rev.* Two female heads facing and overlapping with both profiles visible.
v. Aulock coll.; SNG 1703.

696 MYTILENE, 427 BC El. stater: 15.45 gm.
Obv. Head of Apollo, laureate; *MYTI.* *Rev.* (not shown).
Incuse square.

London; PCG, pl. 8, 23; BMC 28.

Note. This is the only known electrum stater of Mytilene; it has been discussed by Healy (*ANS Mus. Notes* VIII, pp. 1 ff.), who concludes that it was issued during the revolt from Athens in 428/7 BC. Specific gravity shows that this coin has an unusually low percentage of gold, which tends to confirm its emergency nature.

697 TENEDOS, c. 375 BC Tetradrachm: 14.67 gm.
Obv. Double head, to l., bearded male; to r., female wearing hair band and ear-ring. *Rev.* Double axe; to l., fly; to r., bunch of grapes; *TENEAION.*
Berlin; Regling 429.

CYZICUS

On the southern shore of the Propontis (Sea of Marmara) Cyzicus occupied an easily defensible site of great commercial importance, through which most of the traffic between the Aegean and the Black Sea passed. Part of its prosperity was derived from the tunny fisheries, so that a tunny fish, though rarely the principal type, is present as an unvarying adjunct to indicate the origin of the otherwise unsigned issues of Cyzicus.

From the sixth to the fourth centuries Cyzicus was famous for its electrum coinage, for which two denominations, the stater and the hekate, were usually employed. The metallic composition was somewhat variable, but the average gold content seems to have been about 45%; this was sufficient to class the Cyzicene as a gold coin in ancient terminology, and as such it was the only serious rival of the Persian daric before the great pure gold issues of Philip II and Alexander the Great, which finally brought electrum issues everywhere to an end.

To judge from the distribution of finds Cyzicenes were the normal trade currency round the Black Sea, for most finds come either from north-west Asia Minor (the home area of the Cyzicene) or from Bulgaria, Rumania and South Russia. Cyzicenes are also known at Athens from actual finds as well as from inscribed records and literary references, but most of these, too, were probably connected with the Black Sea trade, in which Athens had considerable interests. As a trade currency, the value of the Cyzicene in terms of silver appears to have fluctuated at Athens between about 21 and 28 drachmae according to demand.

The most remarkable feature of the Cyzicenes is that while the tunny fish, as mint signature, provides a minor constant element, the main type is capable of almost unlimited variation, more than 220 distinct types being known. A number recall the types of other cities (*e. g.* no. 711, Pl. 199), but these are hardly numerous enough, nor are the resemblances sufficiently close to justify the suggestion that cities commissioned the mint of Cyzicus to produce types appropriate to themselves; nor can all these types be associated with the history, the monuments or the cults of Cyzicus itself.

Apart from stylistic developments, most Greek coinages maintain their types more or less unchanged over long periods, but to this general rule the three principal electrum coinages, of Cyzicus, Mytilene and Phocaea, are an exception, in that their types were constantly changed; none of them are usually inscribed with the names of their mints, and only the Cyzicenes indicate their origin by the often inconspicuous device of the tunny fish. Between these two groups there was probably a difference in legal standing. The former, bearing the unchanging badge of the city, was that city's 'legal tender', in which alone it paid its employees, and in which alone it received the monies due to it. Electrum coinage was not primarily the 'legal tender' of the issuing cities, because it did not clearly declare its origin, but was a trade currency, comparable to the Maria Theresa taler, marketed because the issuing mints had access to supplies of bullion, and with a value fluctuating according to demand. In these conditions, the type need not be constant and informative, but could be merely pleasing; and so the Cyzicene engravers selected designs from the whole mythological and artistic corpus available to them: heads or full-length figures of gods and goddesses; birds, animals and composite mythical creatures, whole or in part; strange, half human monsters; groups of riders and mounts; statues; rarely an inanimate object, such as a lyre; and even what seem to be portraits of distinguished, but unnamed, individuals (no. 721, Pl. 200). All are executed with a precision and a vitality, which make the types of Cyzicene electrum a unique gallery of Greek art over two centuries.

In the fourth century Cyzicus started a series of silver tetradrachms with two remarkable issues. One bore the portrait and name of Pharnabazus, in whose satrapy Cyzicus lay (no. 718, Pl. 200); the prow of a warship on reverse undoubtedly marks these coins as intended to finance naval operations. No. 720 (Pl. 200), minted soon afterwards shows that Cyzicus joined an alliance, the members of which all employed the same obverse type (see note to no. 616, Samos). Thereafter during the fourth century Cyzicus issued a series of tetradrachms as no. 719 (Pl. 200), and still later a series with wreath-bearing reverse type typical of the second century BC (no. 723, Pl. 201).

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Plate 198

698 CYZICUS, c. 520 BC El. stater: 16.06 gm.
Obv. Head of Athena wearing winged helmet; to r., tunny.
Rev. (not shown). Incuse square.
London (BM); *PCG*, pl. 2, 24. v. Fritze 65.

699 CYZICUS, c. 500 BC El. stater: 16.14 gm.
Obv. Winged monster, with upper part dolphin and lower part human, holding tunny. *Rev.* (not shown). Incuse square.
Berlin; Regling 57. Cf. v. Fritze 79 (twelfth only).

700 CYZICUS, c. 480 BC El. stater.
Obv. Lioness' head; to r., tunny. *Rev.* (not shown). Incuse square.
v. Aulock coll. v. Fritze 39.

701 CYZICUS, c. 500–480 BC El. stater: 16.16 gm.
Obv. Head of Athena wearing crested Attic helmet; below, tunny. *Rev.* (not shown). Incuse square.
Berlin; Regling 124. v. Fritze 67.

702 CYZICUS, c. 500 BC El. stater: 15.99 gm.
Obv. Head of Helios on solar disc; below, tunny. *Rev.* (not shown). Incuse square.
Munich. v. Fritze 105.

703 CYZICUS, c. 500 BC El. stater: 16.18 gm.
Obv. Forepart of ram; to r., tunny. *Rev.* (not shown). Incuse square.
Münz. u. Med. Basel XIX, 467. v. Fritze 46.

704 CYZICUS, c. 500 BC El. stater: 16.17 gm.
Obv. Winged male figure, with lion's head and tail, holding tunny. *Rev.* (not shown). Incuse square.
v. Aulock coll.; *SNG* 1198. v. Fritze 123.

705 CYZICUS, c. 500 BC El. stater: 16.04 gm.
Obv. Nike, with head turned back, holds tunny in r. hand and lifts dress with l. *Rev.* (not shown). Incuse square.
Paris; *Colln de Luynes* 2430. v. Fritze 121.

706 CYZICUS, c. 500 BC El. Stater: 16.09 gm.
Obv. Satyr holding tunny. *Rev.* (not shown). Incuse square.
Brussels; *Colln Hirsch* 1446. v. Fritze 122.

707 CYZICUS, c. 420 BC El. stater: 16.05 gm.
Obv. Kneeling satyr fills cantharus from amphora; beneath, tunny. *Rev.* (not shown). Incuse square.
Munich. v. Fritze 172.

Plate 199

708 CYZICUS, c. 520 BC El. stater: 16.07 gm.
Obv. Naked, bearded, Heracles holding bow and two arrows in l. hand, and brandishing club in r.; to l., tunny. *Rev.* (not shown). Incuse square.
London; *PCG*, pl. 8, 4; *BMC* 27. v. Fritze 107.

709 CYZICUS, c. 520 BC El. stater: 15.99 gm.
Obv. Naked youth holding crested Corinthian helmet in r. hand, and sword in scabbard in l.; below, tunny. *Rev.* (not shown). Incuse square.
Paris. v. Fritze 114.

710 CYZICUS, c. 520–500 BC El. stater: 15.96 gm.
Obv. Kneeling archer, wearing crested Corinthian helmet, with bow hung over l. arm, tests arrow for straightness; to r., tunny. *Rev.* (not shown). Incuse square.
v. Aulock coll.; *SNG* 1204. v. Fritze 116.

711 CYZICUS, c. 440–430 BC El. stater: 16.00 gm.
Obv. Female head with hair in embroidered saccos; below, tunny. *Rev.* (not shown). Incuse square.
Münz. u. Med. Basel, XIX, 470. v. Fritze 136.
Note. This head was probably inspired by Syracusan tetradrachms such as no. 92 (Pl. 30).

712 CYZICUS, c. 450–430 BC El. stater: 16.26 gm.
Obv. Forepart of man-faced bull; to l., tunny. *Rev.* (not shown). Incuse square.
London; *PCG*, pl. 8, 5; *BMC* 82. v. Fritze 174.
Note. Compare coins of Gela, nos 158–161 (Pls 56, 57).

713 CYZICUS, c. 460–440 BC El. stater: 16.02 gm.
Obv. Earth goddess (Ge) rising from ground holds the child Erichthonius, who extends both arms; below, tunny. *Rev.* (not shown). Incuse square.
 London; PCG, pl. 8, 8; BMC 65. v. Fritze 157.

714 CYZICUS, c. 460–440 BC El. stater: 16.06 gm.
Obv. Cecrops, with body of man and tail of serpent, holding olive tree; below, tunny. *Rev.* (not shown). Incuse square.
 Berlin; Regling 294. v. Fritze 158.

715 CYZICUS, c. 425 BC El. hekte.
Obv. Kneeling Helios, radiate, controls two horses; below, tunny. *Rev.* (not shown). Incuse square.
 v. Aulock coll. v. Fritze 148.

716 CYZICUS, c. 400 BC El. stater: 16.07 gm.
Obv. Two eagles perched upon the omphalos of Apollo at Delphi; the omphalos is covered with a knotted woollen net (*cf.* no. 462, pl. 147); beneath, tunny. *Rev.* (not shown). Incuse square.
 London; PCG, pl. 8, 7; BMC 100. v. Fritze 220.

717 CYZICUS, c. 420 BC El. stater.
Obv. Young Dionysus, seated on panther skin, holds out cantharus in r. hand; at his side, a thyrsus; beneath, tunny. *Rev.* (not shown). Incuse square.
 v. Aulock coll. v. Fritze 155.

Plate 200

718 CYZICUS, Pharnabazus, c. 413–373 BC
 Tetradrachm: 14.82 gm.
Obv. Head of Pharnabazus wearing tiara; $\Phi APNABA$. *Rev.* Prow of warship ornamented with eye and griffin; to l. and r., dolphins; below, tunny.
 Berlin; Regling 424.

Note. Robinson (NC 1948, p. 53) suggests that this issue was made in 396 BC, when Pharnabazus came to the relief of the Athenian admiral, Conon, blockaded at Caunus; the date, in any case, should be later than 404 BC. For another portrait of Pharnabazus, see no. 623 (Pl. 184).

719 CYZICUS, c. 375 BC Tetradrachm: 14.90 gm.
Obv. Head of Persephone, with ears of barley in hair; hair in ampyx, saccos and veil; above, $\Sigma \Omega TEIPA$ (off flan). *Rev.* Head of lion; below, tunny on r., oenochoe; $KYZI$;
 Priv. coll. v. Fritze, pl. V, 32.

720 CYZICUS, c. 394–393 BC Stater: 11.39 gm.
Obv. Child Heracles strangling two snakes; ΣYN . *Rev.* Head of lion; below, tunny; $KYZI$.
 London (BM); PCG, pl. 18, 15.
Note. See note on Samos, no. 616 (Pl. 183).

721 CYZICUS, c. 350 BC El. stater: 15.96 gm.
Obv. Head of elderly bearded man, laureate; below, tunny. *Rev.* Incuse square.
 Berlin; Regling 619. v. Fritze 197.

722 CYZICUS, c. 350 BC El. stater: 16.03 gm.
Obv. Head of Pan crowned with ivy; below, tunny. *Rev.* Incuse square.
 Berlin; Regling 756. v. Fritze 191.
Note. Compare the heads of Pan at Panticapaeum, nos 440–442 (Pls 142 and XV).

Plate 201

723 CYZICUS, c. 175 BC Tetradrachm: 16.31 gm.
Obv. Female head crowned with oak. *Rev.* Lighted torch within oak wreath; above and below, monograms; $KYZI-KHN\Omega N$.
 London; PCG, pl. 39, 3; BMC 146. v. Fritze pl. VI, 13.

CYME MYRINA HERACLEA PONTICA

Other cities of north-west Asia Minor coined less regularly. Cyme, despite its long history, never produced a major silver coinage. An issue such as no. 724 (Pl. 201) with a 'wreath-bearing' reverse typical of the second century BC was too small to have had much economic importance and can have been made for the purpose of prestige only; it has been suggested that the individuals whose names appear so prominently on such issues may have been so honoured because they had paid the expenses of minting and perhaps even given the bullion required, as a gift to their fellow citizens. The issue of neighbouring Myrina is of a similar kind and date (no. 725, Pl. 201).

Heraclea on the south coast of the Black Sea prospered under a succession of tyrants during the second half of the fourth century. The coin illustrated, however, appears to be of an earlier date (no. 726, Pl. 201).

724 CYME, c. 189–130 BC Tetradrachm: 16.20 gm.
Obv. Female head (the Amazon, Cyme?). *Rev.* Bridled horse within laurel wreath; to r., one-handled vase; below, $KAAAI\Lambda\Xi$; $KYMAI\Omega N$.
 London; PCG, pl. 39, 9; BMC 73.

725 MYRINA, c. 189–130 BC Tetradrachm: 16.65 gm.
Obv. Head of Apollo, with long hair on neck, laureate. *Rev.* Apollo holding filleted laurel branch and patera; to r.,

omphalos and vase; to l., ΔI ; $MYPINAI\Omega N$; all in laurel wreath.
 London; PCG, pl. 39, 10; BMC 8.

726 HERACLEA PONTICA, c. 380–360 BC Stater: 6.88 gm.
Obv. Facing head of young Heracles in lion skin. *Rev.* Nike kneeling on club inscribes legend $HPAKAEIA$.
 Hess/Leu 12. 4. 1962, 261.

LAMPSACUS

Situated at the north-west corner of Asia Minor, just where the Dardanelles open into the Sea of Marmara, Lampsacus was another city which depended on the traffic passing between the Aegean and the Black Sea. For local purposes Lampsacus struck a small coinage of drachmae and smaller denominations in the fifth and fourth centuries (no. 728, Pl. 202), the later issues being inscribed with the city's name. For foreign trade, however, Lampsacus struck electrum staters in the fifth century (no. 727, Pl. 202), but gold in the fourth (nos 729–735, Pl. 202); both bore the forepart of Pegasus, a device which occurs also on some of the silver issues.

Following the example and the standard of the Persian daric Lampsacus was the first Greek city to make regular issues in gold. As at Cyzicus the types were changed frequently, and about forty were, in fact, used in a period of sixty years. The range is somewhat less than at Cyzicus, since heads of deities or of semi-divine characters form the great majority, but, as at Cyzicus, the artistic quality is always extremely high. One of the most interesting is the portrait of the satrap Orontas, who was in revolt against Artaxerxes II in 362 BC. Lampsacene gold staters enjoyed an international circulation, for specimens have been found as far away as Sicily, and an inscription records a contribution of no less than 584 from Byzantium to the Boeotians towards the expenses of the Sacred War in the mid-fourth century.

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Plate 202

727 LAMPSACUS, c. 450 BC El. stater: 15.23 gm.
Obv. Forepart of winged horse; below, Σ ; all in vine wreath.
Rev. Incuse square.
 London (BM); *PCG*, pl. 8, 17; *BMC* 8. Baldwin 12d.

728 LAMPSACUS, c. 480 BC Drachma: 5.31 gm.
Obv. Double female head wearing hairband, rosette ear-ring and necklace. *Rev.* Head of Athena wearing Corinthian helmet, within incuse square.
 London: *PCG*, pl. 2, 27; *BMC* 10.
 Gaebler 13; Brett, pl. V, 9.

729 LAMPSACUS, c. 350–340 BC Gold stater: 8.41 gm.
Obv. Head of Zeus, laureate; over r. shoulder, sceptre. *Rev.* Forepart of winged horse.
 Munich. Baldwin 29f.

730 LAMPSACUS, c. 380 BC Gold stater: 8.41 gm.
Obv. Head of satyr facing. *Rev.* (not shown). As no. 729.
 Berlin; Regling 635 (*obv.*). Baldwin 8a.

731 LAMPSACUS, c. 380 BC Gold stater: 8.42 gm.
Obv. Nike sacrificing ram. *Rev.* (not shown). As no. 729.
 London; *PCG*, pl. 18, 18. Baldwin 7a.

732 LAMPSACUS, c. 340–330 BC Gold stater: 8.37 gm.
Obv. Head of bearded Cabirus wearing wreathed pileus.
Rev. (not shown). As no. 729.
 London; *PCG*, pl. 18, 19; *BMC* 25. Baldwin 39a.

733 LAMPSACUS, c. 380–370 BC Gold stater: 8.43 gm.
Obv. Head of Maenad wearing wreath of ivy. *Rev.* (not shown). As no. 729.
 Hess/Leu 4. 4. 1963, 63. Baldwin 11b.

734 LAMPSACUS, c. 360–350 BC Gold stater: 8.44 gm.
Obv. Nike, kneeling, lifts hammer to nail helmet to trophy consisting of cuirass and round shield. *Rev.* (not shown).
 As no. 729.
 London; *PCG*, pl. 18, 27; *BMC* 31. Baldwin 26a.

735 LAMPSACUS, 362 BC Gold stater: 8.45 gm.
Obv. Head of satrap Orontas, wearing tiara. *Rev.* (not shown).
 As no. 729.
 Münz. u. Med. Basel, XIX, 475. Baldwin 21.
Note. This coin was probably struck by Orontas, satrap of Mysia, while in revolt against the Persian king, Artaxerxes II.

THE HELLENISTIC KINGDOMS

The conquests of Alexander the Great united for a few years all the territory from Greece to the confines of India under a single ruler; after his premature death the kingship was briefly held jointly by his feeble-minded half-brother, Philip III, and by his posthumous son, Alexander IV, who were unable to control the satraps and generals in charge of the provinces of the empire; the more powerful of these soon established themselves as independent kings. The political history of the Hellenistic age is the story of the rise, fall and conflicts of these kings and their successors.

PERGAMUM

Shortly before the death of Lysimachus, king of Thrace, in 281 BC, Philetaerus, whom Lysimachus had placed in charge of Pergamum, put himself under the protection of Seleucus I of Syria and thus founded the line of Pergamene kings, who retained the seated Athena of Lysimachus as their characteristic reverse type (nos 736, 738, Pl. 203; cf. no. 580, Pl. 176). Since Philetaerus acknowledged the overlordship of Seleucus, it is the head of the latter which appears on his coinage (no. 736, Pl. 203), but the succeeding Pergamene rulers all put on their coins the head and name of Philetaerus as founder of the dynasty (nos 737–739, Pl. 203).

His successors Eumenes I (no. 737, Pl. 203) and Attalus I (no. 738, Pl. 203) greatly enlarged Pergamene territory in Asia Minor at the expense of the Seleucid kings of Syria. Attalus was the first of the dynasty to take the title king; he was a great patron of the arts, and entered into friendly relations with the Roman Republic. His son, Eumenes II (no. 739, Pl. 203) continued this pro-Roman policy, and raised the Pergamene kingdom to its highest peak; Pergamum itself he adorned with splendid buildings including the great altar of Zeus, much of which still survives. In 133 BC Attalus III bequeathed to the Roman people his kingdom, which thus became the Roman province of Asia.

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Plate 203

736 PERGAMUM, Philetaerus, 284–263 BC

Tetradrachm: 17.10 gm.

Obv. Head of Seleucus I, diademed. *Rev.* Athena seated holding spear in l. hand, and resting r. on shield with gorgoneion as boss; above, ivy leaf; on r., bow; below, A in circle; ΦΙΛΕΤΑΙΡΟΥ.

Priv. coll.

Note. Seleucus I of Syria was recognized as the overlord of Philetaerus of Pergamum, whose name, as founder of the dynasty, appears also on nos 737–739 together with his portrait.

737 PERGAMUM, Eumenes I, 263–241 BC

Tetradrachm: 17.02 gm.

Obv. Head of Philetaerus, laureate and diademed. *Rev.* (not shown). As no. 736, but on throne, monogram.

Priv. coll. Westermark XXVIII/R1.

738 PERGAMUM, Attalus I, 241–197 BC

Tetradrachm: 17.08 gm.

Obv. As no. 737. *Rev.* As no. 736, but Athena holds a wreath in r. hand; to l., ivy leaf; in centre, A; to r., bow.

v. Aulock coll.; SNG 1357. Westermark XXXIX/R1.

739 PERGAMUM, Eumenes II, 197–160 BC

Tetradrachm: 16.91 gm.

Obv. As no. 737. *Rev.* (not shown). As no. 738, but to l., stylis with dolphins and ΑΣ.

v. Aulock coll.; SNG 1361. Westermark CXLVIII/R2.

SYRIA

The Seleucid kingdom of Syria was the most powerful, if not quite the most durable, of the successor kingdoms of Alexander the Great, and its coinage provides an impressive series of portraits of rulers, of most of whom no other pictorial record survives. Seleucus, the founder of the dynasty (no. 740, Pl. 204), was an associate of Alexander, who after his death became by degrees ruler of all Alexander's eastern dominions, except Egypt; his defeat of Lysimachus in 281 BC and the adherence of Philetaerus brought in addition most of Asia Minor into his power. On his earliest silver coinage he employed the normal types of Alexander (cf. no. 569, Pl. 172), only adding his own name, but later introduced types of his own (nos 740, 741, Pl. 204), on which the anchor is his own personal signet, and the elephant alludes to the new military arm recently introduced from India.

His son, Antiochus I (no. 742, Pl. 204), renounced further westward expansion, and, indeed, lost much of Asia Minor, partly to Ptolemy II of Egypt; most of these losses, however, were made good in further conflict with Egypt by his son, Antiochus II (no. 744, Pl. 205). At this time, with the defection of Bactria, there begins that gradual whittling down of the Seleucid kingdom, which even its ablest rulers could not wholly arrest. This process was carried a step further by the establishment of the Parthian kingdom in the reign of Seleucus II (no. 745, Pl. 205). His son, Antiochus III, the Great (nos 746, 747, Pl. 205), did to some degree re-establish his authority in the lost provinces, but underestimated the menace of the growing power of Rome;

defeated at the battle of Magnesia in 190 BC, he lost for good all the Seleucid territories in Asia Minor. During this reign, Antiochus (no. 748, Pl. 205), a grandson of Antiochus I, maintained himself in revolt in Asia Minor for a number of years until captured and killed in 214 BC.

Antiochus IV, Epiphanes (no. 749, Pl. 206), son of Antiochus III, is best known for his attempts to Hellenize the Jews, which stimulated a nationalist movement led by the Maccabees; a successful war against Egypt would have culminated in annexation had not Rome intervened to preserve the independence of the Ptolemies. Previous Seleucid rulers had been content to describe themselves on their coinage with the simple title of king, but from Antiochus IV onwards elaborate additional titles were used, which varied with each reign, such as, 'saviour', 'benefactor', 'god', 'conqueror' and the like.

Demetrius I (no. 750, Pl. 206) was a hostage at Rome, who escaped and secured the throne for himself in 162 BC; he proved a vigorous ruler, until he was overthrown by the usurper, Alexander I Balas (no. 751, Pl. 206; no. 755, Pl. 207). The next few years witnessed a rapid succession of short lived and rival rulers, Antiochus VI (no. 752, Pl. 206), Tryphon (nos 753, 754, Pl. 206, Demetrius II (nos 757–758, Pl. 207) and Antiochus VII (no. 759, Pl. 208), though the effective power seems to have rested with Cleopatra, daughter of Ptolemy VI of Egypt, and widow of Alexander Balas (no. 756, Pl. 207; no. 760, Pl. 208). Her son, Antiochus VIII (nos 760–762, Pl. 208) eventually restored some measure of stability to a now much reduced and weakened kingdom, which he was compelled to divide with his half-brother, Antiochus IX (no. 763, Pl. 208). Finally, Tigranes I, king of Armenia (no. 776, Pl. 212), occupied the remains of the Seleucid kingdom in 83 BC, and ruled Syria until defeated by Lucullus in 69 BC, whereupon Syria became a Roman province.

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Plate 204

740 SYRIA, Seleucus I, 312–280 BC Tetradrachm: 17.04 gm.
Obv. Head of Seleucus (or Alexander the Great?) wearing helmet covered with hide and fitted with bull's horn and ear. *Rev.* (not shown). Nike erecting a trophy; in the field, two monograms; *ΒΑΣΙΛΕΩΣ ΣΕΛΕΥΚΟΥ*.
 Berlin. Newell, *ESM* 426.
Note. Minted at Persepolis, c. 300–290 BC.

741 SYRIA, Seleucus I, 312–280 BC Tetradrachm: 16.58 gm.
Obv. Head of horned horse, bridled. *Rev.* Elephant; above, bee; below, anchor; *ΒΑΣΙΛΕΩΣ ΣΕΛΕΥΚΟΥ*.
 Berlin; Regling 839. Newell, *WSM* 1528.
Note. Minted at Pergamum c. 281–280 BC. The obverse presumably represents Bucephalus (= 'Oxheaded'), the horse of Alexander the Great.

742 SYRIA, Antiochus I, 280–261 BC

Tetradrachm: 17.10 gm.
Obv. Head of Antiochus, diademed. *Rev.* Apollo, seated on omphalos covered with knotted woollen net, tests arrow for straightness in r. hand and holds bow in l.; in ex., *ΑΘ* and *ΑΞ*; *ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ*.
 Priv. coll. Newell *WSM* 1372.
Note. Minted at Sardis, 272–261 BC.

743 SYRIA, Antiochus II, 261–246 BC

Tetradrachm: 17.12 gm.
Obv. Head of Antiochus I, diademed. *Rev.* (not shown). As no. 742, but in field, monogram.
 Priv. coll. Newell, *ESM* 190.
Note. Minted at Seleucia, c. 255–246 BC.

744 SYRIA, Antiochus II, 261–246 BC

Tetradrachm: 17.06 gm.

Obv. Head of Antiochus, diademed. *Rev.* As no. 742, but on l., NE (monogram) and on r., KA (monogram) in circle.

London; PCG, pl. 33, 12. Newell, WSM 970.

Note. Struck at Antioch, c. 256–246 BC.

745 SYRIA, Seleucus II, 246–226 BC Gold stater: 8.57 gm.

Obv. Head of Seleucus, diademed. *Rev.* (not shown). Apollo standing, testing arrow for straightness in r. hand and holding bow in l.; in field, two monograms; ΒΑΣΙΛΕΩΣ ΣΕΛΕΥΚΟΥ.

Hess/Leu 16. 4. 1957, 292. Newell, WSM 1010.

Note. Struck at Antioch, c. 232–228 BC.

746 SYRIA, Antiochus III, 223–187 BC

Tetradrachm: 16.98 gm.

Obv. Head of Antiochus, diademed. *Rev.* (not shown). As no. 742, but to l., tripod.

Priv. coll. Cf. Newell, WSM 1096.

Note. Struck at Antioch, c. 208–200 BC.

747 SYRIA, Antiochus III, 223–187 BC.

Tetradrachm: 16.98 gm.

Obv. As no. 746. *Rev.* Elephant; to l., HΦ (monogram); to r., ΠΡ (monogram); ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ.

London; PCG, pl. 33, 13; BMC 28. Newell, ESM 628.

Note. Struck at Ecbatana, c. 205–200 BC.

748 SYRIA, Achaeus, 220–214 BC Tetradrachm: 16.84 gm.

Obv. Head of Achaeus, diademed, bust draped. *Rev.* Athena in fighting attitude, carrying shield and spear; device on shield, an eagle standing on an anchor; to l., horse's head; to r., ΑΙ; ΒΑΣΙΛΕΩΣ ΑΧΑΙΟΥ.

Münz. u. Med. Basel XIX, 536. Cf. Newell, WSM 1440.

Note. Struck at Sardis. With the help of Ptolemy IV of Egypt, Achaeus led an unsuccessful rebellion against Antiochus III in Asia Minor. The device on Athena's shield combines the Seleucid anchor with the Ptolemaic eagle (cf. no. 799, Pl. 218).

749 SYRIA, Antiochus IV, 175–164 BC Gold stater: 8.57 gm.

Obv. Head of Antiochus, diademed. *Rev.* (not shown). Zeus seated, holding Nike and sceptre; ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΘΕΟΥ ΕΠΙΦΑΝΟΥΣ ΝΙΚΗΦΟΡΟΥ (= 'of King Antiochus, god made manifest, bearer of Victory').

London; PCG, pl. 40, 20. Mørkholm, *Studies*, p. 30 (AII/PII).

Note. Mørkholm connects this unusual issue with the famous celebration held by Antiochus at Daphne in 166 BC; Jenkins (NC 1959, p. 43) prefers a date immediately before Antiochus' first Egyptian expedition in 169, during which he presented a gold stater to each of the citizens of Naucratis in Egypt (Polyb. XXVIII, 17, 10–11).

750 SYRIA, Demetrius I, 162–150 BC

Tetradrachm: 16.59 gm.

Obv. Head of Demetrius, diademed, surrounded by laurel wreath. *Rev.* (not shown). Tyche seated holding sceptre and cornucopiae; to l., monogram; in ex., HNP (= year 158 of Seleucid era, i. e. 155/4 BC); ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΣΩΤΗΡΟΣ (= 'of King Demetrius, Saviour').

Priv. coll.

Note. Struck at Antioch.

751 SYRIA, Alexander I, Balas, 150–145 BC

Tetradrachm: 13.71 gm.

Obv. Head of Alexander, diademed. *Rev.* Eagle with palm branch; to r., ΣΙΑΩ and aphlaston; to l., ΔΞΡ (= year 164 of Seleucid era, i. e. 149/8 BC); ΑΛΕΞΑΝΔΡΟΥ ΒΑΣΙΛΕΩΣ Berlin.

Note. Struck at Sidon. The eagle and palm is the normal reverse type of Phoenician mints striking for the Seleucid kings of Syria; the Phoenician weight standard also is used here (cf. no. 753).

752 SYRIA, Antiochus VI, 145–142/1 BC

Tetradrachm: 16.63 gm.

Obv. Head of Antiochus, diademed and radiate. *Rev.* The Dioscuri, mounted, wearing star topped pilei and carrying spears; to r., ΤΡΥ(ΦΩΝ), ΣΤΑ and ΧΑΡ (monogram); to l., ΘΞΡ (= year 169 of Seleucid era, i. e. 144/3 BC); ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΕΠΙΦΑΝΟΥΣ ΔΙΟΝΥΣΟΥ (= 'of King Antiochus, Dionysus made manifest'); all within composite wreath of lily, rose, ivy and barley.

Münz. u. Med. XIX, 545.

Note. Struck at Antioch; ΤΡΥ is presumably Tryphon (see nos 753 and 754) who was regent for, and soon murderer of, the young Antiochus.

753 SYRIA, Tryphon, 142–139 BC Tetradrachm: 13.65 gm.

Obv. Head of Tryphon, diademed, bust draped. *Rev.* (not shown). Eagle standing on thunderbolt; to l., ΠΑ (monogram); to r., ΛΑ (= year 4, i. e. 139 BC); ΒΑΣΙΛΕΩΣ ΤΡΥΦΩΝΟΣ ΑΥΤΟΚΡΑΤΟΡΟΣ (= 'of King Tryphon, absolute ruler').

Priv. coll.; Münz. u. Med. Basel XIX, 547.

Note. Struck at Ace-Ptolemais in Phoenicia; cf. note to no. 751. The exceptional title αὐτοκράτωρ, later used as the equivalent of the Roman *imperator* (cf. no. 809 rev.), is here used to describe the self-made nature of Tryphon's Kingship.

754 SYRIA, Tryphon, 142–139 BC Tetradrachm: 16.03 gm.

Obv. Head of Tryphon, diademed. *Rev.* Macedonian helmet, wreathed and diademed, fitted with goat's horn and ornamented with eagles in medallions on bowl, and with thunderbolt on cheek piece; to l., ΠΑ (monogram); below; ΔΗ; legend as on no. 753; all in oak wreath.

Münz. u. Med. Basel XIX, 546.

Note. Struck at Antioch; for the suggestion that this helmet was an attribute of Zeus as worshipped at Apamea, a city

closely connected with Tryphon and his revolt, see H. Seyrig, 'Notes on Syrian Coins', *NNM* 119, pp. 7ff.

Plate 207

755 SYRIA, Alexander I Balas, 150–145 BC

Tetradrachm: 17.30 gm.

Obv. Heads of Alexander and Cleopatra (his wife), side by side, diademed; Cleopatra, as Tyche, wears veil and calathus; to l., *A* and cornucopiae. *Rev.* (not shown). Zeus, seated, holding sceptre and supporting Nike, who holds thunderbolt; *ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ ΘΕΟΠΑΤΟΡΟΣ ΕΥΕΡΓΕΤΟΥ* (= 'of King Alexander, of divine parentage, benefactor').

Münz. u. Med. Basel XIX, 544.

Note. The thunderbolt in the hand of Nike indicates Seleucia Pieria as the mint. The 'divine parent', to whom the titulary refers, was Antiochus IV, 'the god made manifest' (*cf.* no. 749), whose son Alexander claimed to be.

756 SYRIA, Cleopatra, 125–121 BC Tetradrachm: 16.65 gm.

Obv. Head of Cleopatra wearing diadem and veil. *Rev.* (not shown). Double cornucopiae; below, *ΖΗΡ* (= year 187 of the Seleucid era, *i. e.* 126/5 BC); *ΒΑΣΙΛΙΣΣΗΣ ΚΛΕΟΠΑΤΡΑΣ ΘΕΑΣ ΕΥΕΘΡΙΑΣ* (= 'of Queen Cleopatra, the goddess, bringer of prosperity').

London; *PCG*, pl. 41, 29; *BMC* 1.

Note. Struck at Ace-Ptolemais. Cleopatra was wife in turn of Alexander I Balas (nos 751, 755), Demetrius II (nos 757, 758) and Antiochus VII (no. 759), and mother of Antiochus VIII (nos 760–762).

757 SYRIA, Demetrius II, 145–140 BC and 129–125 BC

Tetradrachm: 16.64 gm.

Obv. Head of Demetrius, diademed. *Rev.* (not shown). Zeus, seated, holding sceptre and Nike; to l., *Ξ*; below, throne, *Ο*; *ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΘΕΟΥ ΝΙΚΑΤΟΡΟΣ* (= 'of King Demetrius, the god, conqueror').

Priv. coll.; Münz. u. Med. Basel XIX, 548.

Note. Struck at Antioch, 129/8 BC.

758 SYRIA, Demetrius II, 145–140 BC and 129–125 BC

Tetradrachm: 16.66 gm.

Obv. As no. 757. *Rev.* (not shown). As no. 757, but below throne *ΞΔ* and in ex., *ΔΗΡ* (= year 184 of the Seleucid era, *i. e.* 129/8 BC).

Priv. coll.

Note. Struck at Damascus.

Plate 208

759 SYRIA, Antiochus VII, 138–129 BC

Tetradrachm: 16.40 gm.

Obv. Head of Antiochus, diademed. *Rev.* (not shown). Athena standing, holding spear, shield and Nike; *ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΕΥΕΡΓΕΤΟΥ* (= 'of King Antiochus, benefactor'); all in laurel wreath.

Priv. coll.

Note. Struck at Antioch.

760 SYRIA, Antiochus VIII, 125–96 BC, and Cleopatra.

Tetradrachm: 16.39 gm.

Obv. Head of Cleopatra, diademed and veiled; head of Antiochus, diademed. *Rev.* (not shown). Zeus, seated, holding Nike and sceptre; *ΒΑΣΙΛΙΣΣΗΣ ΚΛΕΟΠΑΤΡΑΣ ΘΕΑΣ* (= 'of Queen Cleopatra, goddess'), *ΚΑΙ ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ* (= 'and of King Antiochus').

Priv. coll.

Note. Struck at Ace-Ptolemais, *c.* 125 BC while Cleopatra was acting as regent (125–121 BC) for Antiochus VIII.

761 SYRIA, Antiochus VIII, 125–96 BC

Tetradrachm: 16.45 gm.

Obv. Head of Antiochus, diademed. *Rev.* (not shown). Zeus, standing, holding star and sceptre; to l., *ΣΙΔΩ ΙΕΡΑΣ* (= 'Sidon, holy, with right of sanctuary'); *ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΕΠΙΦΑΝΟΥΣ*; in ex., *ΖΡΡ* (= year 197 of the Seleucid era, *i. e.* 116/5 BC); all within laurel wreath.

Priv. coll.

Note. Struck at Sidon.

762 SYRIA, Antiochus VIII, 125–96 BC

Tetradrachm: 15.70 gm.

Obv. As no. 761. *Rev.* (not shown). Zeus, seated, holding sceptre; *ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΕΠΙΦΑΝΟΥΣ*.

Priv. coll.

Note. Struck at Antioch, *c.* 108–97 BC.

763 SYRIA, Antiochus IX, 116–95 BC

Tetradrachm: 16.40 gm.

Obv. Head of Antiochus, diademed. *Rev.* (not shown). Athena, standing, holding spear, shield and Nike; *ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΦΙΛΟΠΑΤΟΡΟΣ* (= 'of King Antiochus, friend of his father').

Note. Struck at Ace-Ptolemais, *c.* 113–112 BC. Antiochus VIII and Antiochus IX were half-brothers, who eventually divided the kingdom between them.

BITHYNIA

This small kingdom in north-west Asia Minor was founded in 297 BC and thereafter survived frequent conflicts with the Seleucids, with the kings of Pergamum and with Heraclea Pontica, until it was bequeathed to Rome by its last king, Nicomedes IV, in 74 BC. Here, as elsewhere, the kings of Syria were the models copied by lesser rulers; Prusias I and II (nos 764–766, Pl. 209) were content with the simple royal title, while Nicomedes II (no. 767, Pl. 209), under the influence of Antiochus IV of Syria,

was the first to employ an additional epithet. The Bithynian dynasty, however, more stable and less often challenged by usurpers than the later Seleucids, were far less extravagant in their use of such epithets.

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Plate 209

764 BITHYNIA, Prusias I, c. 229–182 BC

Tetradrachm: 16.87 gm.

Obv. Head of Prusias, diademed. *Rev.* Zeus, standing, holding sceptre and wreath; to l., thunderbolt and two monograms; *ΒΑΣΙΛΕΩΣ ΠΡΟΥΣΙΟΥ*.

v. Aulock coll.; SNG 244.

765 BITHYNIA, Prusias I, c. 229–182 BC

Tetradrachm: 16.93 gm.

Obv. and *Rev.* (not shown). As no. 764, but monograms different.

Priv. coll.; SNG III, 2681.

766 BITHYNIA, Prusias II, 182–149 BC

Tetradrachm: 16.93 gm.

Obv. Head of Prusias, diademed. *Rev.* (not shown). As no. 764, but to l., eagle on thunderbolt and different monograms.

Brussels; *Colln Hirsch* 1438.

767 BITHYNIA, Nicomedes II, 149–127 BC

Tetradrachm: 16.74 gm.

Obv. Head of Nicomedes, diademed. *Rev.* As no. 764, but to l., eagle on thunderbolt and two monograms; *ΒΑΣΙΛΕΩΣ ΕΠΙΦΑΝΟΥΣ ΝΙΚΟΜΗΔΟΥ*.

Paris.

CAPPADOCIA

The rulers of this backward, inland district of Asia Minor were recognized as kings from the middle of the third century. Their coinage consisted very largely of drachmae, so that the tetradrachm of the usurper Orophernes (no. 768, Pl. 209) is not typical, and may have been struck at Priene rather than in Cappadocia itself.

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Plate 209

768 CAPPADOCIA, Orophernes, pretender, c. 159–157 BC

Tetradrachm: 16.34 gm.

Obv. Head of Orophernes, diademed. *Rev.* (not shown). Nike, standing, holding wreath and palm; to l., owl on altar and monogram; *ΒΑΣΙΛΕΩΣ ΟΡΟΦΕΡΝΟΥ ΝΙΚΗ-*

ΦΟΡΟΥ (= 'of King Orophernes, bringer of Victory'). Berlin.

Note. Five specimens of this issue were found in 1870 at Priene under the pedestal of the cult statue of Athena. Orophernes is known to have stored his treasure in this temple, to which the symbol of owl on altar may refer.

PONTUS

The kingdom of Pontus extended along much of the south coast of the Black Sea. Though the royal dynasty can be traced back to the late fourth century, Mithradates III, c. 220–185/3 BC (no. 769, Pl. 210), was the first to strike coins. The kingship descended regularly from father to son and the portraits of the first three rulers (nos 769–771, Pl. 210) have a strong bucolic character in common. Even if it were not otherwise known, the fact that Laodice, wife of Mithradates IV, was also his sister might have been deduced with some confidence from their coinage (no. 772, Pl. 210). The precise relationship of Mithradates VI to his predecessors is not known, but in his more realistic portraits (no. 773, Pl. 211) his nose still appears to be characteristic of the family.

The reverse types of the Pontic dynasty are impressive examples of Hellenistic 'programme' art. All the reverses include a star (representing the sun) and a lunar crescent, which seem to have been a family device alluding to their Persian descent and to the Persian worship of the celestial bodies; to this same group of ideas belongs Perseus himself (no. 771), the mythical ancestor of the Persians, carrying the head of Medusa, from the blood of which sprang the winged horse Pegasus (no. 773). On no. 772 Mithradates IV and Laodice are very clearly equated with Zeus and Hera.

The most remarkable member of the dynasty was Mithradates VI Eupator Dionysus. A vigorous and resourceful opponent of the Romans, at the height of his power he controlled most of Asia Minor and much of Greece; finally, driven from Pontus, he died in exile. Many of his portraits are strongly idealized (no. 775, Pl. 221), and perhaps deliberately recall Alexander the Great as portrayed on the coinage of Lysimachus (nos 580, 581, Pl. 176). The ivy wreath of the reverse certainly alludes to his surname Dionysus, but also brings to mind the obverse of the cistophoric tetradrachm, the city coinage typical of the Roman province of Asia, which Mithradates successfully held for a number of years.

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Plate 210

769 PONTUS, Mithradates III, c. 220–185/3 BC

Tetradrachm: 17.15 gm.

Obv. Head of Mithradates, diademed, bust draped. *Rev.* Zeus, seated, holding sceptre and eagle; to l., star and crescent; below throne, monogram; *ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ*. London; *PCG*, pl. 32, 1; *BMC* 1.

770 PONTUS, Pharnaces I, 185/3–170 BC

Tetradrachm: 17.00 gm.

Obv. Head of Pharnaces, diademed. *Rev.* Uncertain male figure standing facing; in l. hand he holds a cornucopiae and caduceus; in r., a vine branch, upon which a young deer feeds; to l., star and crescent; to r., three monograms; *ΒΑΣΙΛΕΩΣ ΦΑΡΝΑΚΟΥ*.

Paris.

Note. Pharnaces was son of Mithradates III.

771 PONTUS, Mithradates IV, 170–150 BC Tetradrachm.

Obv. Head of Mithradates, diademed. *Rev.* Perseus standing facing, wearing helmet, chlamys, and winged sandals; in r. hand, head of Medusa; in l. hand, harpa; above, star and crescent; to l., monogram; *ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ ΦΙΛΟΠΑΤΟΡΟΣ ΚΑΙ ΦΙΛΑΔΕΛΦΟΥ* (= 'of King Mithradates, friend of his father and friend of his brother'). v. Aulock coll.

Note. Mithradates IV was brother of Pharnaces.

772 PONTUS, Mithradates IV, 170–150 BC, and Laodice.

Tetradrachm: 17.05 gm.

Obv. Heads of Mithradates and Laodice, diademed, busts draped. *Rev.* Zeus, laureate, holding sceptre and thunderbolt;

Hera holding sceptre; *ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ ΚΑΙ ΒΑΣΙΛΙΣΣΗΣ ΛΑΟΔΙΚΗΣ ΦΙΛΑΔΕΛΦΩΝ* (= 'lovers of their brethren').

Paris.

Note. On the reverse the placing of the name Mithradates next to the figure of Zeus, and of that of Laodice next to Hera is clearly intended to equate the rulers with the deities; Mithradates and Laodice were brother and sister.

Plate 211

773 PONTUS, Mithradates VI, 120–63 BC

Tetradrachm: 16.94 gm.

Obv. Head of Mithradates, diademed. *Rev.* Pegasus grazing; to l., star and crescent; to r., monogram (= Heraclei...); *ΣΗ* (= year 206 of the Bithynian era, i.e. 92/1 BC); *ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ ΕΥΠΑΤΟΡΟΣ*; all in ivy wreath. Priv. coll.

774 PONTUS, Mithradates VI, 120–63 BC

Gold stater: 8.45 gm.

Obv. As no. 773. *Rev.* As no. 773, but stag in place of Pegasus; to r., *ΠΕΡ* (monogram = Pergamum), and *Β* (= year 2 of Pergamene era, i.e. 88/7 BC). v. Aulock coll.

775 PONTUS, Mithradates VI, 120–63 BC

Tetradrachm: 16.80 gm.

Obv. As no. 773. *Rev.* (not shown). As no. 774, but monograms l. and r.; to r., *ΒΚΣ* (= year 222 of Bithynian era, i.e. 75 BC); in ex., *Θ* (= 9th month). London; *PCG*, pl. 44, 2; *BMC* 5.

ARMENIA

Since the coin of Tigranes, King of Armenia (no. 776, Pl. 212), was struck at Antioch, it should be treated as the final issue of the Seleucid monarchy (see p. 373).

Plate 212

776 SYRIA, Tigranes, 83–69 BC (King of Armenia 95–55 BC).

Tetradrachm: 16.45 gm.

Obv. Head of Tigranes wearing tiara, on which a star between two eagles, bust draped. *Rev.* Tyche of Antioch, veiled and wearing turreted crown, seated on rock holding palm; at her feet swims the river god Orontes; in field l. and r., $\Delta H M$; ΒΑΣΙΛΕΩΣ ΤΙΓΡΑΝΟΥ ; all in laurel wreath.

London; *PCG*, pl. 44, 15; *BMC* 2.

Note. Struck at Antioch. The reverse shows the colossal bronze personification of the city of Antioch, created by Eutychides, a pupil of Lysippus, for Seleucus I—one of the most famous statues of the Hellenistic world.

BACTRIA

This area had been conquered by Alexander the Great and for a while formed part of the Seleucid kingdom. About 250 BC, however, in the reign of Antiochus II, a certain Diodotus revolted and made Bactria an independent kingdom. Thereafter follows a long succession of kings, many of whom are known only from their coins, and whose chronology is often very uncertain. Despite the remoteness of Bactria, the coins are purely Greek in character and their reverses closely resemble those of some of the Hellenistic kingdoms in Asia Minor and Syria (compare nos 777–779, Pl. 212 with nos 764 and 767, Pl. 209). A feature which has no real parallel elsewhere in the Greek world is the extraordinary vigour and variety of the portraiture. Hellenistic monarchs were usually shown wearing a simple diadem, but in Bactria there are found in addition the elephant scalp (no. 777, Pl. 212), a tradition derived from Alexander himself (*cf.* nos 796–798, Pl. 217), the kausia (no. 778, Pl. 212), previously worn by the kings of Macedon (no. 562, Pl. 170) and, peculiar to Bactrian kings, the crested helmet decorated with bull's ear and horn (no. 780, Pl. 212).

With the extension of Bactrian rule into north-west India about 200 BC native features begin to appear side by side with the Greek; an Indian weight standard is adopted, a native translation of the Greek obverse legend is placed upon the reverse, and some bronze issues employ the square flans long favoured in India. The Greek elements were, however, persistent and were not extinguished until the early centuries of the Christian era.

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Plate 212

777 BACTRIA, Demetrius, *c.* 190–170 BC

Tetradrachm: 16.82 gm.

Obv. Head of Demetrius, diademed, wearing elephant scalp; bust draped. *Rev.* Heracles, standing facing, holds club and lion skin in l. hand, and crowns himself with r.; to l., ΠΑΚ (monogram); $\text{ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ}$.

London; *PCG*, pl. 33, 17; *BMC* 1.

778 BACTRIA, Antimachus I, *c.* 180 BC

Tetradrachm: 17.00 gm.

Obv. Head of Antimachus, diademed, wearing kausia, bust

draped. *Rev.* Poseidon, laureate, standing facing, holding trident and filleted palm; to r., Ν within circle; $\text{ΒΑΣΙΛΕΩΣ ΘΕΟΥ ΑΝΤΙΜΑΧΟΥ}$.

London; *PCG*, pl. 33, 20; *BMC* 1.

779 BACTRIA, Heliocles, *c.* 150–130 BC

Tetradrachm: 16.40 gm.

Obv. Head of Heliocles, diademed, bust draped. *Rev.* Zeus, standing facing, holds thunderbolt and sceptre; to l., ΗΔΡΚ (monogram); $\text{ΒΑΣΙΛΕΩΣ ΗΛΙΟΚΛΕΟΥΣ ΔΙΚΑΙΟΥ}$ (= 'the just').

London; *PCG*, pl. 41, 33; *BMC* 1.

780 BACTRIA, Archebius, c. 120 BC

Tetradrachm: 16.83 gm.

Obv. Head and shoulders of Archebius, diademed, wearing crested helmet fitted with bull's horn and ear, and aegis; in r. hand, spear. *Rev.* Zeus, laureate, standing facing, holds

sceptre and thunderbolt; to l., monogram; *ΒΑΣΙΛΕΩΣ ΔΙΚΑΙΟΥ ΝΙΚΗΦΟΡΟΥ ΑΡΧΕΒΙΟΥ* (= 'of the King, just, bearer of Victory, Archebius'). London (BM).

PARTHIA

The people known as the Parthians were a semi-nomadic tribe who, in the middle of the third century BC, under their leader Arsaces, occupied the Seleucid province of Parthia (roughly the area south-east of the Caspian Sea), and established there an independent kingdom, in which they formed a military aristocracy. Under Mithradates II, 123–87 BC (no. 781, Pl. 212), Parthian territory was increased in several directions, and contact was made with both China and Rome; in fact, for the next three centuries it was the Parthian kingdom that, in a series of conflicts, set a limit to the eastward expansion of the Roman empire. Mithradates III (no. 782, Pl. 212) was a younger son of Phraates III, who unsuccessfully tried to secure the kingdom for himself with the support of Gabinius, Roman governor of Syria.

The Parthians imitated the Greeks in many fields, not least in their coinage which was inscribed in Greek with elaborate titlatures in the Hellenistic manner; since all kings alike called themselves Arsaces on their coins, attribution to rulers known in literature by their personal names is sometimes uncertain. After nearly five centuries rule the Parthians were overthrown by the Sassanian dynasty which founded the neo-Persian empire in the early third century AD.

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Plate 212

781 PARTHIA, Mithradates II, c. 123–87 BC

Tetradrachm: 15.35 gm.

Obv. Head and shoulders of Mithradates, diademed and robed. *Rev.* Parthian king seated on omphalos examining bow; to r., palm branch; *ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΑΡΣΑΚΟΥ ΕΠΙΦΑΝΟΥΣ* (= 'of the great King, Arsaces, made manifest').

Berlin.

Note. The reverse has been adapted from the Seleucid type of Apollo, as nos 742, 744 (Pls 204, 205).

782 PARTHIA, Mithradates III, 58–55 BC

Tetradrachm: 14.17 gm.

Obv. Head and shoulders of Mithradates, wearing diadem, horned helmet and robe. *Rev.* Parthian king seated on throne, examining bow; to r., B; *ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΑΡΣΑΚΟΥ ΦΙΛΟΠΑΤΟΡΟΣ ΕΥΕΡΓΕΤΟΥ ΦΙΛΕΛΛΗΝΟΣ* (= 'of the great King, Arsaces, friend of his father, benefactor, made manifest, friend of the Greeks').

London (BM); *PCG*, pl. 45, 25.

NORTH AFRICA

The western half of the North African coast, dominated by Carthage, has been dealt with above (p. 300f.); there remains the eastern half divided between the Greek cities of Cyrenaica, which were already minting coins in the sixth century BC, and Egypt, where coinage was first regularly struck only after its conquest by Alexander the Great. Thereafter Cyrenaica formed part of the Ptolemaic kingdom of Egypt.

CYRENAICA

The fertile and well-watered plateau of Cyrenaica was settled by Greeks from the island of Thera about 630 BC, when Cyrene the principal city of the area, was founded; Barce and Euesperides (Benghazi) were both settled in the course of the sixth century. The cities of Cyrenaica were members of a federal organization, as is shown by their use of common coin types. The characteristic type of the area is the silphium plant, now apparently extinct, which was put to a variety of uses, and was one of the country's most valuable products. Frequently combined with the silphium is the head of the principal deity of the area, Zeus Ammon, a Hellenized version of the Egyptian Amon-Ra, to whom also the ram's horn was appropriate. Two other deities, Zeus Lycacus (nos 790, 791, Pl. 215) and Apollo Carneius (no. 792, Pl. 215) represent Peloponnesian cults brought by the early settlers.

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Plate 213

783 CYRENE, c. 550–530 BC Tetradrachm: 17.18 gm.
Obv. Two silphium fruits. *Rev.* Two oblong incuses enclosing striations.
Paris. *BMC*, p. xix, 1b.

784 CYRENE, c. 500 BC Tetradrachm: 17.35 gm.
Obv. Silphium plant; l. and r., fruit. *Rev.* Garden of the Hesperides; on r., Heracles holding club; on l., nymph plucking fruit.
Paris. *BMC*, p. xxii, 10a.

785 CYRENE, c. 500 BC Tetradrachm: 16.81 gm.
Obv. As no. 784. *Rev.* Gazelle standing; to l., silphium and *K*; below, *K*; above, fruit.
Brussels; *Colln. Hirsch* 1834. *BMC*, p. xxiv, 15b.

786 CYRENE, c. 480–470 BC Tetradrachm: 17.08 gm.
Obv. Head of Zeus Ammon, with ram's horn; hair coiled twice round head, with locks loose on neck; to l., silphium fruit. *Rev.* Silphium plant and head and neck of bridled horse; between, silphium fruit; *KYP*.
London (BM); *PCCG*², pl. 51, 13.
Note. The place of this coin in the series of Cyrene is discussed by Jenkins, *NC* 1955, pp. 150ff.

Plate 214

787 CYRENE, c. 470–460 BC Tetradrachm: 16.87 gm.
Obv. Silphium plant. *Rev.* Head of Zeus Ammon with ram's horn; *KYPA*.
Berlin; Regling 115. *BMC* Period II Gp. I.

788 CYRENE, c. 400 BC Tetradrachm.
Obv. Silphium plant; *KYPANAION*. *Rev.* As no. 787; to r., *NIKIOΣ*.
Paris. *Cf. BMC* 79.

Plate 215

789 CYRENE, 305–304 BC Tetradrachm: 15.00 gm.
Obv. Head of Zeus Ammon with ram's horn. *Rev.* Silphium plant; l. and r., monograms; below, r., crab; *KYPH*.
Berlin. *BMC* p. c., 226a.

790 CYRENE, c. 322–313 BC Gold stater: 8.62 gm.
Obv. Quadriga; above, sun; *KYPANAION*. *Rev.* Zeus Lycacus, seated on throne, holding eagle on outstretched r. hand; to l., thymiaterion; *XAIPIOΣ* (retrograde).
Münz. u. Med. Basel, XIX, 593. *BMC* 116; Naville 83.

791 CYRENE, c. 322–313 BC Gold stater: 8.64 gm.
Obv. Quadriga driven by Nike; *KYPANAION*. *Rev.* Zeus

Lycæus standing, laureate, holding sceptre and patera; to l., thymiaterion; *ΠΟΛΙΑΝΘΕΥΣ*.
London; *PCG*, pl. 28, 33. *BMC* 119; Naville 89.

792 CYRENE, c. 308–277 BC Didrachm: 7.68 gm.
Obv. Head of Apollo Carneius with ram's horn. *Rev.* Silphium plant; to l., tripod; to r., *ΕΠ* (monogram); *ΚΥΡΑ*.
London; *PCG*, pl. 28, 34. *BMC* 252.

Plate 216

793 BARCE, c. 440 BC Tetradrachm: 17.08 gm.
Obv. Silphium plant; *ΑΙ* (continuation of rev. legend).

Rev. Head of Zeus Ammon with ram's horn, within beaded circle; *ΒΑΡΚ*.
Paris. *BMC*, pl. clxix, 8a.

794 BARCE, c. 420 BC Tetradrachm: 12.90 gm.
Obv. Silphium plant. *Rev.* Head of Zeus Ammon with ram's horn, laureate; *ΒΑΡΚΑΙΟΝ*.
Priv. coll. *BMC*, p. clxxiii, 23a.

795 BARCE, c. 380 BC Tetradrachm: 13.40 gm.
Obv. Silphium plant. *Rev.* Head of Zeus Ammon with ram's horn; *ΒΑΡΚΑΙ*.
Paris. *BMC* 22.

EGYPT

Pharaonic Egypt struck no coins apart from a few very late and minor issues. The regular production of coinage in Egypt had to await Alexander's conquest and the establishment of a mint at Alexandria, which produced coins bearing Alexander's normal imperial types (no. 569, Pl. 172). On the death of Alexander in 323 BC Ptolemy secured the satrapy of Egypt, and at first, in his coinage at least, maintained the ideal of a united Alexandrian empire; for his coins were still issued in the name of the dead Alexander and differed from Alexander's own coinage only in so far as the portrait of Alexander on the obverse was no longer shown wearing the lion skin of Heracles, but the ram's horn of Zeus Ammon and an elephant's scalp symbolizing India (no. 796, Pl. 217). After a few years there was a further change, when a warlike Athena replaced the seated Zeus of Alexander, though the presence of Alexander's name still maintained the fiction of a united empire (nos 797, 798, Pl. 217). At the same time there appears in the field an eagle standing upon a thunderbolt, which may be regarded as the personal device of Ptolemy, since he adopted it as the reverse type of the coinage struck from c. 305 BC in his own name and with his own portrait (nos 799, 800, Pls 218 and XIX); after his death the eagle on thunderbolt became the standard reverse type for the succeeding rulers of the dynasty (*cf.* nos 806, 807, Pl. 220).

A remarkable feature of the Ptolemaic coinage is the number of heavy gold pieces, which often carry allusions to the divinity of the rulers, both male and female. In accordance with Egyptian royal practice, the Ptolemies normally married their sisters in order to maintain the purity of the royal—and divine—strain; this appears very clearly on no. 801 (Pl. 218), on which the living brother and sister are conjoined with their deified parents, also brother and sister. Another tendency is to apply multiple divine attributes to a single ruler; thus Ptolemy III wears the aegis of Zeus and the solar rays of Helios, and carries the trident of Poseidon (no. 803, Pl. 219). The Greeks in Egypt formed a small ruling class little affected in general by Egyptian culture; thus their coinage is almost wholly Greek. Even the Egyptian deities Sarapis and Isis are portrayed in Greek guise, though both wear discreetly their appropriate Egyptian symbols (no. 807, Pl. 220).

Cleopatra was the last member of the Ptolemaic line, and also the last ruling representative of those dynasties which had risen from the dissolution of Alexander's empire. Her coin (no. 809, Pl. 220) is thus a fitting epilogue to a survey of Greek coinage, though the head of Mark Antony on the other side shows that we have here, in fact, already crossed the dividing line between Greek and Roman coinage.

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Plate 217

796 EGYPT, Ptolemy I, as satrap, 323–305 BC
Tetradrachm: 16.80 gm.
Obv. Head of Alexander wearing ram's horn and elephant scalp. *Rev.* Zeus seated holding eagle and sceptre; to l., thunderbolt; beneath throne, *ΟΡ*; *ΑΛΕΞΑΝΔΡΟΥ*.
Priv. coll.
Note. Minted c. 318–315 BC.

797 EGYPT, Ptolemy I, as satrap, 323–305 BC
Tetradrachm: 17.03 gm.
Obv. As no. 796. *Rev.* Athena in fighting attitude carrying spear and shield; to r., *ΑΙ* and eagle on thunderbolt; *ΑΛΕΞΑΝΔΡΟΥ*.
Hess/Lcu: 16. 4. 1957, 313.
Note. Minted c. 315–312/10 BC.

798 EGYPT, Ptolemy I, as satrap, 323–305 BC

Tetradrachm: 16.97 gm.

Obv. As no. 796, but on lion's skin near neck, Δ . *Rev.* As no. 797, but ΛII (monogram) and EY ; $\Lambda\Lambda\epsilon\epsilon\alpha\text{N}\Delta\text{P}\epsilon\text{I}\text{O}\text{N}$. Hess/Leu 15. 4. 1957, 317.

Note. Minted c. 315–312/10 BC. The unusual $\Lambda\Lambda\epsilon\epsilon\alpha\text{N}\Delta\text{P}\epsilon\text{I}\text{O}\text{N}$ could mean either 'an Alexander coin' or 'an Alexandria coin'. In either case it marks the fading of the concept of a single empire ruled centrally by Alexander or any single successor.

Plate 218

799 EGYPT, Ptolemy I, as king, 305–283 BC

Tetradrachm: 16.38 gm.

Obv. Head of Ptolemy, diademed, wearing aegis. *Rev.* Eagle on thunderbolt; to l., $\Sigma\Lambda$ (monogram); $\text{ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ}$.

Priv. coll.

Plate XIX

800 EGYPT, Ptolemy II, 285–246 BC

Gold pentadrachm: 17.85 gm.

Obv. Head of Ptolemy I, diademed and wearing aegis. *Rev.* (not shown). As no. 799, but to l., shield and Σ ; between legs, Y (= year 20, i. e. 266 BC).

London; BMC 6.

Note. Minted in Cyprus.

Plate 218

801 EGYPT, Ptolemy II, 285–246 BC

Gold octadrachm: 27.77 gm.

Obv. Draped and diademed busts of Ptolemy II and Arsinoe II; to l., shield; $\Lambda\Delta\epsilon\Lambda\Phi\Omega\text{N}$ (= 'of brother and sister'). *Rev.* Draped and diademed busts of Ptolemy I and Berenice I; $\Theta\epsilon\Omega\text{N}$ (= 'of gods').

London; PCG, pl. 33, 21; BMC 2.

Note. The obverse legend refers to the fact that Arsinoe II, second wife of Ptolemy II, was also his sister; the reverse shows their deified parents, also brother and sister.

Plate 219

802 EGYPT, Ptolemy II, 285–246 BC

Gold octadrachm: 27.79 gm.

Obv. Head of Arsinoe II, veiled, wearing stephane and small horn of Zeus Ammon; behind head, lotus-tipped sceptre. *Rev.* Double cornucopiae bound with diadem; below, Π ; $\text{ΑΡΣΙΝΟΗΣ ΦΙΛΑΔΕΛΦΟΥ}$.

Athens.

Note. Struck at Paphos in Cyprus.

803 EGYPT, Ptolemy III, 246–221 BC

Gold octadrachm: 27.83 gm.

Obv. Head of Ptolemy radiate and wearing aegis; over l. shoulder, trident combined with sceptre. *Rev.* Cornucopiae bound with diadem and surmounted by radiate crown; below, ΔI ; $\text{ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ}$.

London; PCG, pl. 33, 24; BMC 103.

804 EGYPT, Ptolemy III, 246–221 BC

Gold octadrachm: 27.73 gm.

Plate XX

Obv. Head of Berenice II, wife of Ptolemy wearing diadem and veil.

Plate 219

Rev. Cornucopiae bound with diadem; to l., bee;

$\text{ΒΕΡΕΝΙΚΗΣ ΒΑΣΙΛΙΣΣΗΣ}$.

Berlin.

805 EGYPT, Ptolemy III, 246–221 BC

Tetradrachm: 14.12 gm.

Obv. and *Rev.* As no. 804, but no bee.

Hess/Leu 16. 4. 1957, 324.

Plate 220

806 EGYPT, Ptolemy IV, 221–204 BC

Gold octadrachm: 27.75 gm.

Obv. Head of Ptolemy diademed, bust draped. *Rev.* Eagle standing on thunderbolt; to r., monogram; $\text{ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ}$.

London; PCG, pl. 34, 26; BMC 33.

807 EGYPT, Ptolemy IV, 221–204 BC

Tetradrachm: 14.11 gm.

Obv. Busts of Sarapis, wearing laurel wreath and calathus, and Isis, wearing wreath of barley and sun-disc flanked by snakes; both draped. *Rev.* Eagle on thunderbolt carrying cornucopiae bound with diadem; below, ΣI (= Sidon); $\text{ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ}$.

Münz. u. Med. Basel XIX, 587.

808 EGYPT, Ptolemy IV, 221–204 BC

Gold octadrachm: 27.73 gm.

Obv. Head of Arsinoe III, sister and wife of Ptolemy IV, wearing stephane, ear-ring and necklace; bust draped; over l. shoulder, sceptre. *Rev.* Cornucopiae bound with diadem and surmounted by star; $\text{ΑΡΣΙΝΟΗΣ ΦΙΛΟΠΑΤΟΡΟΣ}$. London (BM); PCG, pl. 34, 28.

809 EGYPT, Cleopatra VII, 51–30 BC

Tetradrachm: 14.32 gm.

Obv. Head of Cleopatra, diademed, bust draped; $\text{ΒΑΣΙΛΙΣΣΑ ΚΛΕΟΠΑΤΡΑ ΘΕΑ ΝΕΩΤΕΡΑ}$ (= 'Queen Cleopatra, goddess, the younger'). *Rev.* (not shown). Head of M. Antony; $\text{ΑΝΤΩΝΙΟΣ ΑΥΤΟΚΡΑΤΩΡ ΤΡΙΤΟΝ ΤΡΙΩΝ ΑΝΔΡΩΝ}$ (= 'Antonius, imperator for the third time, triumvir').

London, PCG, pl. 44, 16; BMC Syria, 56 (Antioch).

Note. This issue has been discussed by Buttrey in *ANS Museum Notes* VI, pp. 95ff. He concludes that 'the younger' Cleopatra Thea is here distinguished from the Seleucid queen (see no. 756, Pl. 207). The Phoenician standard points to a mint in Phoenicia, which was among the territories given to Cleopatra by Antony in 36 BC. The most likely date for the coin is 34 BC.

GLOSSARY

AEGIS	An attribute of Zeus and Athena, usually shown as a goatskin. Most commonly worn by Athena as a short cloak with a Gorgoneion (<i>q.v.</i>) mounted at the centre, or by kings identified with Zeus; <i>cf.</i> no 780 <i>obv.</i> , Pl. 212 and no. 803 <i>obv.</i> , Pl. 219.	DIADEM	Originally the blue band which surrounded the Persian tiara (<i>cf.</i> nos 622, 623, Pl. 184); adopted by Alexander the Great and his successors as an emblem of royalty; <i>cf.</i> nos 580, 581, Pl. 176.
AMPHORA	A large two-handled vessel for the storage or transport of oil and wine; <i>cf.</i> no. 401, Pl. 130.	DIDRACHM	A coin weighing two drachmae (<i>q.v.</i>).
AMPYX	A metal band, sometimes ornamented, for securing the hair over the forehead; <i>cf.</i> no. 92, Pl. 30.	DIOBOL	A coin weighing two obols (<i>q.v.</i>).
APHLASTON	The stern ornament of a war galley; <i>cf.</i> no. 751 <i>rev.</i> , Pl. 206.	DISTATER	A double stater (<i>q.v.</i>).
ARYBALLOS	A small globular vessel for holding oil; <i>cf.</i> no. 305 <i>rev.</i> , Pl. 105.	DODECADRACHM	A coin weighing twelve drachmae (<i>q.v.</i>).
ASTRAGALOS	A knuckle bone (<i>cf.</i> no. 341, Pl. 114), often used in games; <i>cf.</i> no. 674 <i>rev.</i> , Pl. 194.	DRACHMA	Literally a 'handful' of six iron spits (obols, <i>q.v.</i>), which were a primitive form of currency; then the weight of silver equivalent in value to six spits; hence a coin weighing a drachma of gold or silver. The actual weight of the drachma varied in different systems (<i>cf.</i> Introduction, p. 17f.).
BIGA	A light chariot drawn by two horses or mules; <i>cf.</i> no. 56, Pl. 18.	ELECTRUM	An alloy of gold and silver used for the earliest coinages of Asia Minor, where it was obtained from alluvial deposits; when these were exhausted, the alloy was produced artificially.
BUCRANIUM	Literally an ox-head, but usually used only of the skull; <i>cf.</i> no. 268 <i>obv.</i> , Pl. 93.	EXERGUE	That part of a coin-type which lies below the ground-line.
CADUCEUS	A staff terminating in entwined snakes, carried by Hermes; <i>cf.</i> no 553, Pl. 168.	FLAN	The piece of metal, adjusted to the correct weight, upon which the coin-types are impressed by the dies.
CALATHUS	A basket for holding fruit, and thus an attribute implying productiveness; <i>cf.</i> no. 755, Pl. 207.	GORGONEION	The head of the Gorgon Medusa, reputed to turn to stone those who looked on it; <i>cf.</i> no. 349 <i>obv.</i> , Pl. 115; no. 533, Pl. 163.
CANTHARUS	A drinking vessel with handles and high stem; <i>cf.</i> no. 298 <i>obv.</i> , Pl. 103.	HARPA	A sickle or curved sword; <i>cf.</i> no. 771 <i>rev.</i> , Pl. 210.
CHITON	A long under-garment; <i>cf.</i> no. 68, Pl. 21.	HEKTE	A 'sixth' of a stater (<i>q.v.</i>); a denomination commonly used in the electrum coinages of Cyzicus, Lesbos and Phocaea.
CHLAMYS	A short cloak usually worn by horsemen; <i>cf.</i> no. 556 <i>obv.</i> , Pl. 169.	HEMISTATER	A half stater (<i>q.v.</i>).
CORNUCOPIAE	'Horn of plenty', usually filled with fruit and corn, symbolizing prosperity and fertility; <i>cf.</i> nos 802–805 <i>rev.</i> , Pl. 219.	HIMATION	A long outer garment worn by men; <i>cf.</i> no. 188 <i>rev.</i> , Pl. 67.
CRATER	A large two-handled vessel with wide mouth for mixing wine and water; <i>cf.</i> no. 459, Pl. 145.	HYDRIA	A vessel with three handles for carrying water; <i>cf.</i> no. 273 <i>rev.</i> , Pl. 95.
DARIC	The standard gold coin of the Persian Empire, probably named after Darius I, by whom it was first minted <i>c.</i> 500 BC; <i>cf.</i> no. 618, Pl. 183.	KAUSIA	A Macedonian felt hat with broad brim to protect the head from the sun; similar to a petasos (<i>q.v.</i>); <i>cf.</i> no. 556 <i>obv.</i> , Pl. 169.
DECADRACHM	A coin weighing ten drachmae (<i>q.v.</i>).		

LITRA	A Sicilian weight, originally for copper; then a piece of silver equivalent in value to a litra of copper; hence a small silver coin weighing slightly more than an Attic obol (<i>q.v.</i>).	SACCOS	A cap for enclosing the hair; <i>cf.</i> no. 92, Pl. 30.
NIKE	The goddess of victory, usually winged; at first she symbolized victory in games (<i>cf.</i> no. 490 <i>rev.</i> , Pl. 154), but later military victory as well (<i>cf.</i> no. 137, Pl. 48).	SATRAP	The title of the governor of a province in the Persian Empire.
OBOL	Literally a 'spit'; iron spits were a primitive form of currency, six making a handful or drachma (<i>q.v.</i>); then the weight of silver equivalent in value to one spit; hence a coin weighing an obol of gold or silver. The actual weight of the obol varied according to that of the drachma, of which it was a subdivision.	SHEKEL	A Near Eastern weight, and hence the standard silver coin of the Persian Empire; Hellenized as siglos; <i>cf.</i> no. 619, Pl. 183.
OCTADRACHM	A coin weighing eight drachmae (<i>q.v.</i>)	SIGLOS	The Greek name for the Persian shekel (<i>q.v.</i>).
OENOCHOE	A jug for pouring wine; <i>cf.</i> no. 469 <i>rev.</i> , Pl. 149.	SKYPHOS	A two-handled cup; <i>cf.</i> no. 647 <i>rev.</i> , Pl. 189.
OMPHALOS	Literally 'navel'; hence the sacred stone of Apollo at Delphi, believed to be the centre of the earth; <i>cf.</i> no. 462 <i>rev.</i> , Pl. 147 and no. 716, Pl. 199.	SPHENDONE	Literally a 'sling'; hence a band for confining the hair at the back of the head; <i>cf.</i> no. 94, Pl. 31.
OVERSTRIKE	See Introduction, p. 18; <i>cf.</i> no. 37, Pl. 13; no. 257, Pl. 89; no. 538, Pl. 164 and no. 660, Pl. 191.	STATER	A standard unit of weight, and hence the principal denomination of a coinage.
PENTADRACHM	A coin weighing five drachmae (<i>q.v.</i>).	STEPHANE	An upright band which encircles the head; <i>cf.</i> no. 507 <i>obv.</i> , Pl. 158.
PEPLOS	A long outer garment of women; <i>cf.</i> no. 68, Pl. 21.	STRIGIL	A curved scraper used by athletes; <i>cf.</i> no. 305 <i>rev.</i> , Pl. 105.
PETASOS	A broad-brimmed sun-hat, similar to the kausia (<i>q.v.</i>), and usually worn by Hermes; <i>cf.</i> no. 555 <i>rev.</i> , Pl. 168.	STYLIS	A naval standard consisting, at its simplest, of an upright pole with a cross-bar; <i>cf.</i> no. 574 <i>obv.</i> , Pl. 174.
PHIALE	A shallow circular dish, often with a central boss, used for pouring libations; <i>cf.</i> no. 66 <i>rev.</i> , Pl. 20.	TETRADRACHM	A coin weighing four drachmae (<i>q.v.</i>).
POLOS	A high circular head-dress worn by goddesses; <i>cf.</i> no. 669 <i>obv.</i> , Pl. 193.	TETROBOL	A coin weighing four obols (<i>q.v.</i>).
QUADRIGA	A chariot drawn by four horses; <i>cf.</i> no. 116, Pl. 40.	THYMIATERION	A high stand on which incense is burnt; <i>cf.</i> no. 222 <i>obv.</i> , Pl. 78.
		THYRSUS	A staff tipped with a pine-cone, carried by Dionysus or his devotees; <i>cf.</i> no. 403 <i>obv.</i> , Pl. 130.
		TIARA	A head-dress worn by the Persian king and by Persian notables; only the king himself was permitted to wear it with its apex erect (<i>cf.</i> symbol on no. 620 <i>obv.</i> , Pl. 183); for others the apex was folded over (<i>cf.</i> nos 621, 622 <i>obv.</i> , Pl. 184).
		TRIDRACHM	A coin weighing three drachmae (<i>q.v.</i>).
		TYCHE	Good fortune; from the Hellenistic period often personified as the Good Fortune of a particular city; <i>cf.</i> no. 776 <i>rev.</i> , Pl. 212.
		WAPPENMÜNZEN	See under Athens, p. 324.
		WEIGHT	
		STANDARDS	See Introduction, p. 17f.

ABBREVIATIONS

AJN	<i>American Journal of Numismatics</i>	Mitt. Bay. Num. Ges.	<i>Mitteilungen der Bayerischen Numismatischen Gesellschaft.</i>
ANS	American Numismatic Society		
Atti e Mem.	<i>Atti e Memorie dell'Istituto Italiano di Numismatica</i>	NC	<i>Numismatic Chronicle.</i>
Beschreibung	<i>Beschreibung der antiken Münzen: Königliche Museen zu Berlin, Berlin 1888-94.</i>	Newell, ESM	E. T. Newell, <i>The coinage of the Eastern Seleucid mints</i> , New York 1938.
BM	British Museum.	Newell, WSM	E. T. Newell, <i>The coinage of the Western Seleucid mints</i> , New York 1941.
BMC	<i>Catalogue of the Greek coins in the British Museum.</i>	NNM	<i>Numismatic Notes and Monographs.</i>
BMC C. Gr.	<i>Catalogue of the Greek coins in the British Museum: Central Greece.</i>	Obv.	Obverse.
BSFN	<i>Bulletin de la Société Française de Numismatique.</i>	PCG	<i>Guide to the principal coins of the Greeks</i> , London, 1932.
Colln. de Luynes	J. Babelon, <i>Catalogue de la Collection de Luynes I-IV</i> , Paris 1924-36.	PCG ²	<i>Guide to the principal coins of the Greeks</i> , 2nd ed., London 1959.
Colln. Hirsch	P. Naster, <i>La Collection Lucien de Hirsch</i> , Brussels 1959.	Regling	K. Regling, <i>Die antike Münze als Kunstwerk</i> , Berlin 1924.
Hunter	G. Macdonald, <i>Catalogue of Greek coins in the Hunterian Collection I-III</i> , Glasgow 1899-1905.	Rev.	Reverse.
Jameson	<i>Collection R. Jameson: Monnaies grecques antiques I-IV</i> , Paris 1913-32.	Rev. Belge.	<i>Revue Belge de Numismatique.</i>
JDAI	<i>Jahrbuch des Deutschen Archäologischen Instituts.</i>	Rev. Belge. Phil. Hist.	<i>Revue Belge de Philologie et d'Histoire.</i>
JHS	<i>Journal of Hellenic Studies.</i>	Rev. Num.	<i>Revue Numismatique.</i>
JNG	<i>Jahrbuch für Numismatik und Geldgeschichte.</i>	Rev. Suisse.	<i>Revue Suisse de Numismatique.</i>
		Riv. It. Num.	<i>Rivista Italiana di Numismatica.</i>
		Röm. Mitt.	<i>Römische Mitteilungen.</i>
		Schw. Münzbl.	<i>Schweizer Münzblätter.</i>
		SNG	<i>Sylloge Nummorum Graecorum.</i>
		ZfN	<i>Zeitschrift für Numismatik.</i>

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